

METAL INDUSTRY

THE JOURNAL OF NON-FERROUS METALS

EDITOR • L. G. BERESFORD, B.Sc., F.I.M.

MANAGING DIRECTOR: ARTHUR B. BOURNE, C.I.Mech.E.

index to volume 98

JANUARY TO JUNE 1961

FIFTY-SECOND YEAR OF PUBLICATION

Reference Table

PAGE	ISSUE	PAGE	ISSUE
1—20 ..	.. 6 January	261—280 ..	.. 7 April
21—40 ..	.. 13 January	280—308 ..	.. 14 April
41—60 ..	.. 20 January	309—328 ..	.. 21 April
61—80 ..	.. 27 January	329—348 ..	.. 28 April
81—100 ..	.. 3 February	349—368 ..	.. 5 May
101—120 ..	.. 10 February	369—388 ..	.. 12 May
121—140 ..	.. 17 February	389—408 ..	.. 19 May
141—160 ..	.. 24 February	409—428 ..	.. 26 May
161—180 ..	.. 3 March	429—448 ..	.. 2 June
181—200 ..	.. 10 March	449—468 ..	.. 9 June
201—220 ..	.. 17 March	469—488 ..	.. 16 June
221—240 ..	.. 24 March	489—508 ..	.. 23 June
241—260 ..	.. 31 March	509—528 ..	.. 30 June

Editorial Offices: 9 Charlotte Street, Birmingham 3.

Advertising and Publishing Offices: Dorset House, Stamford Street, London, S.E.1

Published Weekly on Fridays: Price One Shilling.

Annual Subscription Rates: Home, £3 7s. 6d., Overseas, £3 12s. 0d. Canada and

U.S.A., \$10.00. Subscription includes one copy of METAL INDUSTRY HANDBOOK published annually.

PUBLISHED BY ILIFFE PRODUCTION PUBLICATIONS LIMITED DORSET HOUSE STAMFORD STREET LONDON, S.E.1

Index to Volume 98

ARTICLES

	PAGE		PAGE		PAGE
Alloy Structures	354	Coulometric Plating Thickness Meter	455	New Plant and Equipment :-	
Alloys, Analysis of Zinc	319	Creep Data	166	Automatic Polishing	151
Alloys, Copper	315	Deep Drawing, Aluminium Alloys for	431, 451, 477, 499, 517	Fume Cleaning	152
Alloys, Forming Techniques for Titanium	3, 27	De-stacking Ingots	29	Heating Small Billets	439
Alloys, Hyper-Eutectic Aluminium-Silicon	123, 143, 171	Developments in Metal Spinning	335	Level Control	51
Alloys, Iron in Aluminium-Magnesium-Silicon	83, 109	Die-Cast Lighting Fixture Components	232	Level Indication	151
Alloys, Machining High-Nickel	92	Die-Casting Machines, Feeding	70	Magnetic Separation	440
Alloys, Mechanized Extrusion of Copper	356	Die-Casting Machines, Plunger Lubrication	148	Oven Curing	211
Alloys, Properties of Light	172	Die-Casting Review	69, 147	Plate Shearing	51, 439
Alumina, Flame-Sprayed	249	Die-Castings, Machined and Finished	391	Precision Casting	212
Aluminium Alloys for Deep Drawing	431, 451, 477, 499, 517	Die Design, Facets of Pressures	471	Spark Erosion	211
Aluminium Industry, Hungarian	247	Die Finishing, Effects of	231	Stud Welding	439
Aluminium-Magnesium-Silicon Alloys, Iron in	83, 109	Die Storage	69	Thermal Treatment	152
Aluminium Plate, Welding Thick	92	Drying Moulds	126	Thread Whirling	151
Aluminium Rolling Stock	187	Effects of Die Finishing	231	Vacuum Treating	151
Aluminium Sheet, Flash Annealing	516	Electrical Equipment in Non-Ferrous Metal Production	6	Vibration Analysis	211
Aluminium-Silicon Casting Alloys, Hyper-Eutectic	123, 143, 171	Electrical Equipment, Industrial	72	Welding	51
Aluminium, Vitreous-Enamelling	7	Electro-Erosion Machining	206	Nickel Alloys, Machining High	92
Analysis of Zinc Alloys	319	Electronics Industry, Metal Finishing for	331, 359	Nickel, High-Purity	246
Annealing Brass Strip	206	Electro-Refined Titanium	170	Niobium Alloys, Improved	52
A.S.T.M. Standards	393	Electroshaping	63		
Atomic Progress	187, 318, 475	European Die-Casting Production	454	Obituary :-	
Base Metal Markets	11	Explosive Metalworking	149	Alexander, G. H.	519
Book Reviews :-		Extrusion, Discussion on	286	Andrew, Prof. J. H.	396
"A.S.T.M. Standards, 1960 Supplements." Published by American Society for Testing Materials	501	Extrusion of Copper Alloys, Mechanized	356	Aston, J. H.	135
"The Brittle Fracture of Steel." By W. D. Briggs	111	Facets of Pressure Die Design	471	Chatwin, S. S.	420
"Cermets." Edited by J. R. Tinklepaugh and W. B. Crandall	251	Feeding Diamond Lapping Compounds	150	Croft, Sir A.	150
"Elementary Science for Electroplating Students and Foremen." B. E. A. Ollard	480	Feeding Die-Casting Machines	70	Dannatt, Prof. C. W.	323
"Engineering Metallurgy—Part II." By R. A. Higgins	339	Ferrous Alloys	354	Ehrlich, F.	396
"Growth of Crystals." Edited by A. V. Shubrikov and N. N. Sheftal	111	Finishes, Organic and Metallic	167, 190, 207, 229	McGrath, A. E. A.	303
"A History of Metallography." By Cyril Stanley Smith	251	Finishing, Effects of Die	231	Pollock, W.	150
"A History of Platinum." By D. McDonald	479	Finishing for the Electronics Industry	331, 359	Ryde, J. W.	420
"Jahrbuch der Oberflächentechnik 1961." Published by Metall-Verlag G.m.b.H.	251	Finishing Supplement	7, 45, 87, 127, 167, 207	Snout, Sir A. J. G.	172
"Mechanical Polishing." By Burkart, Silman and Draper	339	Fission Fragment Damage in Ceramics	475	Sjogren, J.	172
"Metallurgy for Engineers." By E. C. Rollason	339	Flame-Sprayed Alumina	249	Thum, E. E.	323
"Metals Handbook." Published by American Society for Metals	480	Flash Annealing Aluminium Sheet	516	Watson, E. F.	30
"Practical Design of Sheet Metal Stampings." By F. Strasser	251	Flow Measurement	295	Wilson, Mrs. J.	172
"A Practical Manual of Industrial Finishes." By B. M. Letsky	111	Folded Metal	295		
"Textures in Metal Sheets." By F. A. Underwood	479	Forming Techniques for Titanium Alloys	3, 27	Oil-Fired Furnaces	163, 183, 203
"Theory and Practice of Arc Welding." By J. R. Sacks	252	Forming, Titanium Sheet	103, 131	Opportunities Directory	334
"Thermoelectric Materials and Devices." Edited by Irving B. Cadoff and Edward Miller	111	Friction Welding	420	Organic and Metallic Finishes	167, 190, 207, 229
"Vacuum Technology Transactions." Published by Pergamon Press Ltd.	479	Fuels, Coal Tar	228	Out of the Melting Pot	2
"Welding Handbook." Published by American Welding Society	252	Furnace, High Temperature Diffusion	273	22, 42, 62, 82, 102, 122, 142, 162, 182	
Brass Strip, Annealing	206	Furnaces, Oil-Fired	163, 183, 203	202, 222, 242, 262, 282, 310, 330, 350	
Burner Control	232	Galvanizing Conference, Sixth International	491, 511	370, 390, 410, 430, 450, 470, 490, 510	
Carburized Chromium	360	Handling Large Parts for Plating	419	Overcoming Porosity	147
Casting Technology, Titanium	223, 243, 271	Heat Transfer Between Metals	435	Oxidation of Molybdenum	396
Castings Production, Russian	320	High Conductivity Springs	374	Oxidation Prevention During Forming	50
Ceramics, Fission Fragment Damage	475	High Pressure Testing	246	Oxygen Determinations	245
Chemical Polishing	371	High-Purity Nickel	26	Parliamentary News	524
Classic Text on Metallurgy, A	30	High Temperature Diffusion Furnace	273	Passivation of Copper	50
Cleaning of Surfaces	127, 227	Hungarian Aluminium Industry	247	Plastic Deformation of Uranium	318
Coal Tar Fuels	228	Hyper-Eutectic Aluminium-Silicon Casting Alloys	123, 143, 171	Plate, Welding Thick Aluminium	92
Cold Extruded Titanium	209	I.B.F. Conference	438	Plated Aluminium	246
Continuous Cast Rod and Tube	245	I.M.F. Annual Conference	397, 415, 436	Plating, Handling Large Parts for	419
Continuous Vacuum Metallizing	245	Improved Niobium Alloys	52	Plating Shop Layout and Installation	297, 311
Conversazione, Metallurgical	108	Industrial Electrical Equipment	72	Plating Thickness Meter, Coulometric	455
ConveyORIZED Automatic Spraying	47	Investigational Techniques	23, 43, 66	Plunger Lubrication for Die-Casting Machines	148
Copper Alloys	315	Investment Casting Moulds	210	Polishing, Chemical	371
Copper, Passivation of	50	Iron in Aluminium-Magnesium-Silicon Alloys	83, 109	Polishing, Versatile Automatic	45
Correspondence :-		Lapping Compounds, Feeding Diamond	150	Porosity, Overcoming	147
Bootman, H.	72	Layout and Installation, Plating Shop	297, 311	Powder Metal Parts	6
Longer Crucible Life	314	Lead and Tin, Vacuum Distillation of	146	Powder Metallurgy—A Survey	351, 375
Sampling Metals and Residues	72	Lighting Fixture Components, Die-Cast	232	Powder Metallurgy in Russia	418
Williams, C. J.	314	Load Measurement	374	Press Forming	520
Corrosion of Austenitic Stainless Steel in CO ₂	187	London Metal Exchange	336		
Corrugated-Core Sandwich Construction	413	Machined and Finished Die-Castings	391	Products and Processes :-	
		Machining High-Nickel Alloys	391	Aluminium Sandwich Panel Construction	90
		Magnesium in Galvanizing	501	Chemical-Resistant Monolithic Flooring	268
		Magnesium-Silicon Alloys, Iron in Aluminium	83, 109	Cleaning and Lubricating Dies	91
		Magnetic Extraction	107	Combined Aluminium Car Wheel and Drum	395
		McFadzean Laboratory, The	411	Degassing and Brazing at High Temperature	394
		Measurements, Strip Thickness	227	Drilling Hard Materials	395
		Mechanized Extrusion of Copper Alloys	356	Electrorefining Zirconium	394
		Men and Metals	9, 35, 48, 71, 89, 107, 126, 155, 170, 186, 209, 250, 270, 296, 314, 340, 359, 383, 403, 423, 440, 454, 476, 498, 520	Fluidized Bed Heat-Treatment	189
		Metal Finishing	152	Forming Aluminium Foil	189
		Metal Finishing for the Electronics Industry	331, 359	Headroom for Lift-Off Type Annealing Furnaces	394
		Metal Industry Handbook	248	Improvements in Plating Barrels	91
		Metal Melting, Rapid	459	Induction Heating for Soldering Type-Pieces	188
		Metallic Finishes, Organic and	167, 190, 207, 229	Italian Pressure Die-Casting Machines	394
		Metallographic Specimens	92	Laboratory Melting of High Melting Point Metals	268
		Metallurgical Conversazione	108	Lightweight Torch for TIG Welding	269
		Metallurgy, A Classic Text on	30	Longer Crucible Life	269
		Metals, A Popular Treatise on	460	Measuring Thickness of Sprayed Coatings	90
		Metalworking, Explosive	149	Process Measurement and Control	269
		Micro-Tensile Testing	192	Producing Special Sizes in Sheet	91
		Molybdenum, Oxidation of	396	Rapid Automatic Hydraulic Clamping	188
		Moulds, Investment Casting	210	Rapid Moulding for Foundry Patterns	268
				Rapid Tinning of Aluminium	268
				Rubber Press Technique for Economical Forming	188
				Separating Powders from Solution	268
				Specialized Equipment for Special Metals	90

Trimming and Scurfing	188
Versatile Flexible Furnace	395
Zone Refining on a Production Basis	269
Properties of Light Alloys	172
Pyrometer, Radiation	10
Radiation Pyrometer	10
Rapid Metal Melting	459
Rare Gases	520
Reactor Materials, Sintered	49
Resistance Welding	355
Rod and Tube, Continuous Cast	515
Rolling Titanium Alloys	519
Russian Powder Metallurgy in	418
Russian Castings Production	320
Sampling Metals and Residues	28
Sandwich Construction, Corrugated-Core	413
Scientific Instruments and Apparatus	31
Sheet Forming, Titanium	103, 131
Shim Brazing	460
Silicon Alloys, Iron in Aluminium-Magnesium	83, 109
Sintered Reactor Materials	49
Sixth International Galvanizing Conference	491, 511
Spinning, Developments in Metal	335
Spraying, Conveyorized Automatic	47
Spring Meeting 1961	283
Stainless Steel in CO ₂ Corrosion of	187
Standard Specifications	112, 125, 212, 228, 335
Storage, Die	69
Strip Thickness Measurements	227
Stud Welding	267
Surfaces, Cleaning of	127, 227
Thorium, Preparation of	107
Tin-Alloy Bearings	186
Titanium Alloys, Forming Techniques for	3, 27
Titanium Casting Technology	223, 243, 271
Titanium, Cold Extruded	209
Titanium, Electro-Refined	270
Titanium Sheet Forming	103, 131

Trade Publications:—

A.E.W. Ltd.	79
Air Automation	464
Alcan Industries Ltd.	387
Ashmore, Benson, Pease & Co. Ltd.	219
Audley Engineering Co. Ltd.	139
Basel Ltd.	464
British Titan Products Co. Ltd.	59, 179, 307
Cambridge Instrument Co. Ltd.	79
Canning & Co. Limited, W.	19, 219, 239
Carter Gears Ltd.	427
Croda Ltd.	179, 219, 279
Crompton Parkinson Ltd.	427
Davy and United Engineering Co. Ltd.	19
Delapena and Son Ltd.	307
Department of Scientific and Industrial Research	239
Diversey (U.K.) Ltd.	219
Elco Furnaces Limited	19, 139
Electronic Instruments Ltd.	139
Enfield Rolling Mills Ltd.	179
Geigy Co. Ltd., The	179
General Electric Research Laboratory	239
Gilbert (Industrial) Ltd., G. and R.	39
Glacier Metal Co. Ltd.	59
G.W.B. Furnaces Ltd.	307
Hadfields Ltd.	139
Head, Wrightson & Co. Ltd.	427
Holmes & Co. Ltd., W. C.	427
Hooker Ltd., W. J.	307
Imperial Aluminium Co. Ltd.	79, 307
Imperial Chemical Industries Ltd.	19
Incandescent Heat Co. Ltd.	59, 219, 427
Johnson, Matthey & Co. Ltd.	307
Kent Ltd., George	39
Lead Development Association	219
Metalelectric Furnaces Ltd.	39
Mond Nickel Co. Ltd., The	387
Monometer Manufacturing Co. Ltd.	307
Morgan Refractories Ltd.	307
Morganite Crucible Ltd.	239
Precision Chains Ltd.	139
Production Engineering Research Association	464
Pye and Co. Ltd., W. G.	387
Pyrene Co. Ltd.	387
Radiovisor Parent Ltd.	279
Rhodes and Sons Ltd., Joseph	387
Royce Electric Furnaces Ltd.	59
Solus-Schall	19, 139, 179, 387
Suffolk Iron Foundry (1920) Ltd.	307
Tin Research Institute	307
Trumeter and Co. Ltd.	139
Vaneco Ltd.	464
Ward, Thos. W. Ltd.	279
Wild-Barfield Electric Furnaces Ltd.	515
Tube, Continuous Cast Rod and	318
Uranium, Plastic Deformation of	146
Vacuum Distillation of Lead and Tin	45
Versatile Automatic Polishing	7, 87
Vitreous-Enamelling Aluminium	92
Welding, Friction	319
Welding Thick Aluminium Plate	
Zinc Alloys, Analysis of	

EDITORIALS

B.I.S.R.A. Report	409
Broken Promises	81

Copper Refining	121
Demand for Technicians	21
Electricity in Industry	469
Fire Prevention	349
Five Factors	309
Future of Copper, The	429
Get Together	101
Hot Dip Galvanizing	489
Lead and Zinc Outlook	141
Lead and Zinc Supplies	241
Metallurgy for Engineers	281
Metals in China	1
Nickel and Chromium Recovery	61
Powder Metallurgy	201
Problem of Communication	329
Progress Report	389
Research at the N.P.L.	369
Sell or Sink	41
Small Mercies	221
Standardization	449
Stress-Corrosion Cracking	261
Stress on Machines and Men	181
Tin Research	161
Trading with West Germany	509

AUTHORS

Al-Samarrai, S. H. K.	288
Ardis, W. T.	103, 131
Arnold, R. R.	288
Ashton, S. J.	123, 143, 171
Ausmus, S. L.	223, 243, 271
Baird, C.	316
Beall, R. A.	223, 243, 271
Bishop, E. E.	127
Blake, J. C.	436
Brown, R. J.	167, 190, 207, 229
Carse, A. T.	103, 131
Coakham, Dr. J. W.	288
Darby, C. R.	297, 311
Davies, M. H.	491
Dawson, J.	331, 359
Doyle, W. M.	123, 143, 171
Du Rose, A. H.	397
Entwistle, Dr. A. R.	315
Feltham, Dr. P.	315
Flint, G. N.	414
Forrester, P. G.	437
Gajan, R. J.	319
Geelham, D. M.	319
Goode, W.	471
Green, E. G. C.	491
Harris, J. D.	29
Hatherley, M.	315
Jameson, F. L.	28
Jenkins, Dr. I.	351, 375
Jennings, Dr. P. H.	316
Melbourne, S. H.	414
Muir, J.	123, 143, 171
Murcott, P. J., and A. F.	69
Pagnelli, M.	83, 109
Parker, R. J.	288
Pody, J.	3, 27
Reid, F. H.	436
Ryder, D. A.	23, 43, 66
Sacchi, F.	83, 109
Schofield, M.	30
Singer, Professor A. R. E.	288
Smith, C. J.	431, 451, 477, 499, 517
Sprinz, I.	396
Taylor, J. A.	163, 183, 203
Thorley, T.	263
Wachtell, R. L.	396
Walmsley, P. F.	371
Watson, S. A.	398
White, R. A.	455
Whitton, Dr. P. W.	286
Wilcox, R. J.	286
Wood, F. W.	223, 243, 271
Wynn, J. K.	315

METAL MARKET
REPORTS AND PRICES

Company Reports	444, 464, 484, 524
Financial News	19, 39
59, 79, 99, 119, 139, 159, 179, 199, 219, 239	
259, 279, 307, 327, 347, 367, 387, 407, 427	
Industrial News	13
33, 53, 73, 93, 113, 133, 153, 173, 193	
213, 233, 253, 274, 301, 321, 341, 361	
381, 401, 421, 441, 461, 481, 502, 521	
Light Metal Statistics	99
119, 159, 259, 279, 327, 367, 443, 523	
Light Metal Statistics in Japan	39, 79, 99, 219, 367

Metal Market News	16
36, 56, 76, 96, 116, 136, 156, 176, 196	
216, 236, 256, 276, 304, 324, 344, 364	
384, 404, 424, 445, 465, 485, 505, 525	
Australia	36, 404
Birmingham	16, 36
56, 76, 96, 116, 136, 156, 176, 196, 216, 236	
256, 276, 304, 324, 344, 364, 384, 404, 424	
Bolivia	304
Canada	16, 136, 256
Chile	136, 176, 196
Cuba	465
France	304
Holland	364
India	116
Italy	96, 276, 344
Japan	344, 424
New York	16
36, 56, 76, 96, 116, 136, 156, 176, 196	
216, 236, 256, 276, 304, 324, 344, 364	
384, 404, 424, 445, 465, 485, 505, 525	
Paris	56, 76, 96, 156, 176, 236, 324, 445
West Germany	56
Yugoslavia	16, 76, 116, 216, 256, 384, 416
Zurich	59, 139, 239, 347, 407, 504
Metal Statistics	17
Non-Ferrous Metal Prices	17, 197, 197
37, 57, 77, 97, 117, 137, 157, 177, 197	
217, 237, 257, 277, 305, 325, 345, 365	
385, 405, 425, 446, 466, 486, 506, 526	
Overseas Prices	17
37, 57, 77, 97, 117, 137, 157, 177, 197	
217, 237, 257, 277, 305, 325, 345, 365	
385, 405, 425, 447, 467, 487, 507, 527	
Scrap Metal Prices	18
38, 58, 78, 98, 118, 138, 158, 178, 198	
218, 238, 258, 278, 306, 326, 346, 366	
386, 406, 426, 446, 466, 486, 506, 526	
Stock Exchange	20
40, 60, 80, 100, 120, 140, 160, 180, 200	
220, 240, 260, 280, 308, 328, 348, 368	
388, 408, 428, 448, 468, 488, 508, 528	

NEW COMPANIES

A.B.G. (Electrodepositors) Ltd.	484
Alboston Ltd.	444
Aluminium Platers (Leeds) Ltd.	279
Arrow Metals Co. Ltd.	99
Ashley Precision (Parkstone) Ltd.	444
Associated Refractories Sales Ltd.	19
B.B. Electroplating Co. (Camberwell) Ltd.	484
Blackham (Metals) Ltd., A. S.	444
Bowmets Ltd.	484
Carter (Hampton) Ltd., A. H.	327
Cheetham and Sons (Metals) Ltd., H.	279
Clark Ltd., Wilfred	99
C.M.R. Findings Ltd.	39
Conductors Ltd.	484
Conish Smithy Ltd.	307
Covered Structures Ltd.	387
Creed (Metal Fabrication) Ltd., D and E.	307
Dunlop Metallurgical Services Ltd.	484
East Anglian Wire Working and Engineering Company Ltd.	39
Ellis Ltd., J. J.	367
England (Tubes) Ltd., John	159
F. and S. (Accessories) Ltd.	19
France and Kendrick Ltd.	307
Frost and Sons (Metal Spraying) Ltd.	327
Fulcher and Co. Ltd., Peter	387
Fuller Development Ltd., Rigby	199
Fuller's Metal Works Ltd.	199
Grove Polishing Co. Ltd.	367
Gullick Bros. (Walsall) Ltd.	327
Hann and Co. Ltd., A. S.	327
Harrison (Scrap Metals) Ltd., A. E.	367
Heat Extraction Ltd.	307
Hendon Metal Works Ltd.	367
Heppenstall Metal Co. Ltd.	484
Hill Bros. Metals Ltd.	307
Ingot Casting Machines Ltd.	99
Interallloys Ltd.	444
Ipsen Industries Ltd.	387
Jackman Anodised Products Ltd.	279
J.B. Demolition Ltd.	444
Jones Separators Ltd.	367
K. and F. Treatments Ltd.	39
Kenmont Metals Ltd.	279
Lovell Metals Ltd.	279
M. and M. Industrial Metal Co. (Farnborough) Ltd.	387
Marshall Ltd., J. and M.	327
Materials and Methods Ltd.	19
McDougall & Co. (Metal Merchants) Ltd., G. D.	39
McKenna and Sons Ltd., C.	307
Metal Developments (1960) Ltd.	39
Metalworks (High Wycombe) Ltd.	484
Metapac Limited	19
Miller Ltd., Guy	484
Mond Nickel Co. Ltd.	327
Morgan Crucible Ltd.	99
Morganite Carbon Ltd.	99
Morganite Electroheat Ltd.	99
Morganite Research and Development Ltd.	99

Moss Castings Ltd., Henry	199
Mossfield Fabrications Ltd.	307
Newland and Co. Ltd., Mark	387
Nutfield Metal Works Ltd.	39
Parker Ltd., J. and M.	199
Parmick Engineering Ltd.	119
Poulton and Son (Refractories) Ltd.	39
Precision Press Brakes Ltd.	99
Presswork and Fabricators Ltd.	367
Radcliffe Brass Foundry Ltd.	444
Rainor Ltd.	159
Saunderson and Costant (Cemented Carbides) Ltd.	79
Sharp and Sons (Wickford) Ltd., H. W.	484
Sherbourne Metal Products Limited	19
Silbond Refractories Ltd.	387
Slatier Street Metals (Non-Ferrous) Ltd.	259
Spencer Bros. (Chester) Ltd.	484
Spraytron Equipment Ltd.	327
Tepa Ltd.	159
Tewkesbury Plating Co. Ltd.	39
Thermal Exchanges Ltd.	307
Tilson Metal Fabrications Ltd.	387
Tyneside Metal Spraying and Engineering Co. Ltd.	119
Walthamstow Scrap Metal Ltd.	387
Warnerson (Windscreens) Ltd.	484
Watts and Co. Ltd., S. A.	444
Wessex Heat Treatments Ltd.	19
West Limited, B. T.	199
Whelan and Sons Castings (Enfield) Ltd., J.	387
Whiston Metals Ltd.	367
White (Metal Merchants) Ltd., J. T.	79

PERSONALIA

Adams, Richard	107
Alexander, Dr. W. O.	423
Ailcott, J. A.	250
Allen, Dr. N. P.	423
Allen, W. K. G.	476
Altwegg, W. K.	9
Amey, H. E.	35
Amos, Lloyd	403
Anelli, D. J.	355
Appleton, W. G. J.	71
Atkins, C. J.	355
Arwell, J. W.	9
Axford, Lee G.	170
Bache, R. P. S.	35
Bailey, Ivor A.	209
Bailey, J. C.	296
Bailey, J. E. C.	89, 340, 520
Baker, Alan W.	314
Bailey, Wilfrid	476
Baillieu, Rt. Hon. Lord	476
Baldock, J. M.	314
Ball, Major C. J. P.	126, 284
Ball, Dr. C. S.	454
Ball, S. W.	35
Ballard, W. E.	48
Bardgett, W. E.	423
Barnard, C. F.	498
Barr, Charles A.	10
Barr, William	250
Barratt, Sydney	476
Barton, K. A. M.	314
Batcneior, L. C.	423
Batchelor, W. H.	454
Batty, F. W.	383
Baumann, J. H.	314
Beard, Dr. D. S.	250
Beeching, Dr. Richard	250
Bell, Dr. J.	296
Bell, R. E. H.	48
Bennett, J. C.	9
Bennett, R.	355
Benson, H. P. N.	9
Bersford, L. G.	296
Berk, A. F.	440
Bevis, P. J. R.	250
Bickerton, J. R.	126
Biers, Dr. Mont Howard	250
Biggin, J.	440
Bindon-Blood, F. J.	35
Birchough, J.	126
Bird, G. L. H.	71
Birdcell, John J.	155
Bish, G. R.	498
Bishop, E. B.	296
Black, A. S.	48
Black, G. H.	89
Black, John	235
Blackmore, F.	340
Blanc, Dr. G. M.	186
Blinch, John	403
Boag, D. J. W.	250
Bond-Williams, N. I.	107, 283
Bouffart, Maurice	9
Bovey, L.	10
Bowley, Sir Anthony	155
Boys, R. H. C.	10
Bradbury, E. J.	296, 423
Bradley, A. H.	250, 270
Brennan, James	296
Brenner, Miss J.	9
Bright, L. S.	440
Brining, W.	340
Britton, T.	403
Brook, Harry	186

Brook, H. B.	403
Brooke, N. R. R.	48
Brooker, H. R.	520
Brooks, Alanson L.	403
Broomhead, A.	10
Brown, A. J. N.	383
Brown, C. S.	10
Brown, H. G.	355
Bruneau, A. A.	296
Buchanan-Dunlop, C. J.	355
Budd, J. C.	10
Burden, Rt. Hon. Lord	498
Burgess, E. F.	10
Burke, Harold	498
Bush, E. L.	270
Bush, K. J.	440
Bushell, A. F.	403
Butterworth, J. S.	476
Button, J. C. E.	10
Buxton, W. R.	383
Byrne, B. J.	71
Campbell, A. H.	454
Campbell, C. G.	10
Campbell, D. J. S.	89
Cawley, Horace	234
Chadwick, R.	296
Chandler, R. E.	476
Chatwin, S. S.	296
Chidwick, C. A.	48
Childs, J. C.	340
Clapham, M. J. S.	250, 270, 340
Clark, K.	186
Clark, N.	383
Clarke, B. R. D.	10
Clarke, C. W.	9
Clarke, H.	498
Clayton, R. A.	403
Cleghorn, A. G.	89
Clements, E. W. F.	454
Clifford, A. E.	314
Clitheroe, Lord	355
Cockroft, Sir John	48
Colclough, Dr. T. P.	250
Coley, R. J.	250
Coley, R. W.	250
Colquhoun, J. C.	10
Conway, Cyril G.	520
Cook, P. M.	10
Cooper, H. E.	48
Cope, R. E.	250
Coppock, E. F.	126
Cornock, V. S.	250
Cottrell, Professor A. H.	107, 283
Coventry, A. F.	48
Cox, E. H.	314
Cox, Sir Harold Roxbee	10, 355
Coyne, M.	35
Craig, Dr. James	296
Crane, J. R. H.	423
Croft, John Arthur	170
Crossland, Brigadier H. P.	454
Crummack, R.	476
Crump, S. V. J.	440
Cullinan, G. H. W.	89
Cunningham, J. B. W.	155
Custis, P. J.	35
Dalton, Vice-Admiral Sir Norman	10
Darnley, Arthur George	476
Davies, Emrys	250
Davies, F. T.	454
Davis, W. S.	35
Dawkins, B.	476
Dawson, S. S.	454
Day, W. H.	440
Dean, P. M. W.	71
Denison, Laurie	89
Dennison, T.	235
Dent, N. R.	10
Derry, L. M. H.	423
Desbriere, G.	520
Deusch, R. L.	270
Dhavernas, Jean M.	250
Dickinson, F.	423
Dolton, D. J. W.	10, 250
Douglas, J. F.	71
Douglas, Hon. Lewis W.	340
Dowding, M. F.	107
Drabble, P. P. C.	520
Drake, D. E.	35
Drury, William	440
Duddy, D. L.	107
Easterbrook, A. T.	454
Ebremare, G. G.	9
Edinburgh, H. R. H. The Duke of	440
Edmundson, D.	155
Edwards, J. R.	250
Edwards, N. E.	403
Elice, Norman	383
Ellis, J. E.	403
Ellstub, St. John de Holt	9, 270
Elvin, J. H.	476
Emery, Peter	403
Emrys-Evans, Paul V.	71
Entwistle, J. E.	520
Etheridge, E.	296
Evans, Sir Lincoln	454
Evans, D. W.	383
Evans, L.	10
Evans, R.	9
Everard, W. H.	270
Ewens, F. H.	454
Fairbank, L. H.	296
Fallon, J.	355
Farenden, F.	355

Felton, D. G.	440
Ferguson, J.	498
Fieldhouse, F. M.	403
Fiennes, M. A.	107
Firth, Graham	48, 71
Firth, Tom C.	71
Fitzgerald, Martin Lawrence	476
Flanders, Dr. J. S.	296
Fleck, Sir Alexander	9
Flux, R. W.	520
Francis, Brian	107
Franklin, A. W.	423
Fraser, D. K.	48
Freeman, J.	270
Gallie, T. H.	423
Gardiner, G. C. I.	9
Geddes, Charles F.	155
George, A.	383
Gerhardt, R.	340
Gibbs, D.	250
Gilbert, H.	423
Gill, E. C.	170
Gilling, R. S.	403
Goldmid, H. J.	10
Goldthorpe, H.	35
Goodge, F. W.	355
Gordon, Dr. H. E. Zentler	186
Gordon, J. Roy	340
Gotley, Paul	314
Gourlay, Dr. J. S.	250
Green, J. J.	10
Graham, I. E.	250
Grant, G.	186
Gray, Dennis W.	126
Gray, K. J.	35
Gray, T. E.	520
Grazebrook, O. F.	403
Green, H. C.	250
Gregory, Edwin	270
Gregory, Dr. R. A.	314
Gregory, S. A.	250
Green, Bernard Blackwell	270
Gribbin, G. F.	383
Griffin, W. H.	454
Griffiths, J. R.	35
Grose, J. W.	89
Guillan, Lieut.-Colonel S. C.	283, 296
Guingand, Sir Francis de	355, 383
Gurney, T. R.	126
Hahn, R.	355
Haig-Ferguson, J. W.	155
Haigh, F.	270
Hall, W. A.	440
Hamilton, Dr. W. D.	340
Hamman, R. F.	107
Hammond, David William	454
Hancock, P. F.	355
Hand, Kenneth	250
Hannay, D. A.	235
Harris, A. T.	314
Harris, C. S.	383
Harris, G. T.	9
Harris, W.	107, 340
Hart, G. Arnold	440
Harvey, J. T. H.	10
Hastings, D. J.	270
Hawkins, F. G.	520
Haycroft, T. W.	296
Haynes, F. G.	35
Hearn, A.	9
Henderson, J. M.	423
Heslop, S.	476
Heys, E.	270
Higginbotham, J.	270
Higginbotham, W. H.	186
High, C. W.	250
Hignett, H. W. G.	126
Hill, B. G.	9
Hill, H. F.	10
Hilsom, C.	340
Hinckley, H. G.	186
Hindson, Eric	10
Hinshelwood, Sir Cyril	520
Hinton, D. I. S.	476
Hird, Francis Maurice W.	126, 285
Hirsch, Dr. P. B.	209, 498
Hitchcock, J. O.	48
Hobbs, P.	48
Hollyman, Haydn	296
Holm, Dr. John M.	440
Holmes, Leonard	89
Hooker, R. G.	170
Hoole, B.	186
Hopwood, S.	250
Hove, T. C.	498
Horwood, W. S.	403
Howard, C. J.	71
Howard, R. J. F.	10
Howe, W. J. O.	498
Howell, N. L.	126
Hoves, H. W.	403
Howitt, F.	340
Hughes, H.	340
Huggins, P.	454
Hughes, W. E.	133
Hume, D. A.	270
Hume-Rothery, Professor W.	340
Hunter, E. J.	476
Hunter, Judith	9
Hunter, S. A.	9
Hurst, Frank A.	340
Hurst, Harry M.	9
Hutchinson, C. E.	340
Huxtable, R. G.	476
Ibberson, W. G.	440

	PAGE		PAGE		PAGE
Inman, Col. R.	440	Moore, Major R. E.	296	Ross, F. A.	270
Ireland, S. H.	440	Moore, R. P.	498	Ross, V. J.	250
Jackson, Dr. C. J.	296	Moore, R. V.	155	Rothwell, H.	383
Jakobi, Dr. J.	355	Mordike, Dr. B. L.	340	Rowlett, D. A.	296
James, K. R. H.	355	Morley, K. B.	250	Rubbra, A. A.	9
Jardine, Peter	126, 170	Morris, C. H.	10	Runciman of Oxford, Viscount	383
Jarman, E.	403	Morris, H. B.	48	Russell, D. B.	250
Jarvis, L. A.	355	Morris, Philip H.	10	Rust, R. A.	454
Jay, P. N.	170	Morris, Robert	440	Rutter, K. D.	383
Jeffrey, I. M.	48	Morrough, H.	423	Ryder, J. G.	250
Jenkins, W. G. A.	270	Mould, P.	270	Sale, R.	498
Jephcott, Sir Harry	355	Moulson, Janet	170	Salmson, J. R.	209
John, W. Harold	403	Moyse, R. J.	403	Salt, D. C. M.	314
Johnson, C. S.	355	Muir, G.	403	Satchell, H. L.	270
Johnson, R. K.	71	Mumby, H. H.	48	Schicht, E. A. E.	9
Jolly, T.	476	Munnery, L. G.	498	Seligman, P. W.	355
Jones, R. F.	107	Murray, C.	383	Shakespeare, J.	340
Jones, Sir Walter Benton	355	Murray, L. J.	454	Sharp, George C.	423
Kay, Dr. J. M.	10, 355	Musgrove, Sir Cyril	155	Shields, H. G.	126
Kee, W. W.	170	Muston, E. T.	71	Simmonds, K. R.	383
Keenan, M. P.	89	Nash, H. J.	126	Simon, Viscount	71
Kent, Rodney	48	Neelands, A. R.	440	Singer, T. K.	35
Kent, R. G.	71	Newitt, Prof. D. M.	9	Skinner, E. J.	35
King, E. H.	250	Newman, E. G. V.	126	Skinner, F. L.	10
Kirk, F. A.	10	Newman, R. P.	476	Sinms, W. L.	296, 423
Klaveren, P. H. van	48	Nicholas, R. G.	285	Slater, Dr. I. G.	35
Knight, G. C.	186	Norouza, S.	48	Slater, J. H.	48, 71
Koller, V.	340	North, W. F.	48	Slater, R. Ivor	9
Kremer, Dr. H. A. F. L.	186	Northcott, Dr. L.	423, 476	Slater, W. F.	340
Lacey, Gerald W.	340	Norton, J. D.	403	Smales, A. A.	270
Lake, Dr. William H. G.	270	Oade, Bert	250	Smailey, E. G.	403
Lambert, L. C.	209	Oldroyd, James	170	Smith, A.	9
Lambert, P.	170	Oliff-Lee, J. D. St. C.	170	Smith, A. J. Hugh	250
Lampitt, A. F.	476	Oliver, Kenneth Arthur	170	Smith, I. Weston	314
Lancashire, A. R.	71	O'Neill, Professor H.	250	Smith, J. Ferguson	10
Lane, Arthur Clive	314	Orford, W. C.	107, 283	Smith, Russell	126
Lane, P. H. R.	126	Oulton, Air Vice-Marshal W. E.	440	Smith, R. J.	48
Lang, J. Russell	9	Owen, A. G. B.	476	Smith, S. E.	423
Langlands, John S.	48	Paddon-Smith, D.	454	Snow, H. A.	423
Lapish, R.	498	Padley, Wilfred	235	Sommerville, G. F.	383
Lea, R. F. G.	71	Pagnamenta, C. F.	170	Spence, Dr. R.	340
Leach, Edward Blackwell	296	Palethorpe, L. G. W.	10	Spencer, H. F.	170
Lees, Dr. A. D.	48	Pallet, O. A.	250	Spens, J. Ivan	270, 314
Leevers, K.	155	Parr, T. F.	9	Stafford, F. L.	296
Leigh, John S.	186	Parsons, B. P. R.	383	Stanier, Sir William	498
Leitch, D. A.	250	Pavey, Brian	10	Stapley, A. J.	250
Leonard, M. W.	270	Payn, D. W.	45	Stedford, Sir Ivan A. R.	476
Levesley, Brigadier A.	270	Pearce, Arnold E.	250	Stein, I. Melville	9
Lewin, G. E.	107	Penn, H. J.	440	Stern, H.	340
Liddard, A. D.	403	Pentecost, F. G.	440	Stevens, J. M.	454
Liddard, P. D.	355	Perry, E. R.	440	Stewart, A. G.	454
Lippold, M. D.	423	Petapiece, D. A.	383	Stewart, J. C. C.	155
Lisle, J. E.	340	Peters, C. M.	454	Stock, Allen L.	498
Littler, Dr. J. S.	155, 355	Pfeil, Dr. L. B.	283	Strath, Sir William	35
Lockspeer, Sir Ben	296	Pheazey, J. R.	355	Stretton, A. T.	520
Lofthouse, J. A.	73	Piercy, E. K.	340	Stubbs, R. Lewis	10
London, Lord Mayor of	10	Pierson, H. L.	126	Stuchbery, A. L.	498
Lonsdale, K.	383	Pipkin, John C.	48	Studholme, J. D.	270
Loxley, R. A. K.	270	Pither, C. A.	89	Swabey, P. S. W.	340
Lunt, G. E.	454	Plowden, Lord	35	Swain, H.	355
Macdiarmid, N. C.	454	Polanyi, Prof. M.	170, 285	Swindells, Lionel	107
Mackay, R. P.	35	Pole, C. G. Tudor	314	Swindells, Dr. N.	296
Mackrill, F. H. A.	170	Poor, R. Dennis	10	Swinden, F. R.	383
MacLaren, John L.	73	Potter, Alan	10	Symons, D. S.	186
MacLeod, Rt. Hon. Ian	340	Powell, B.	10	Talbot, G.	454, 498
MacMillan, H. R.	476	Power, G.	10	Tangye, Sir Basil	498
Major, D.	48	Prain, Sir Ronald	107, 283, 340, 383	Tanner, C. H.	440
Makins, Sir Roger	476	Preston, Sir Kenneth	89	Taylor, A. J.	9
Maitby, Peter David Ralph	440	Preston, Hon. R. M. P.	9	Taylor, D. W.	355
Manders, Dr. Charles	71	Prior, P. J.	314	Taylor, Dr. James	440
Mann, B. B.	314	Pritchett, C.	314	Taylor, J. A.	498
Mansfield, D. H.	340	Pryor, G. R.	498	Taylor, L. W.	186
Margesson, Rt. Hon. Viscount	107	Pryor, Robert Nelson	476	Taylor, M. R.	48
Marsh, D.	250	Pugh, L. R. P.	71	Taylor, Col. R. W. W.	250
Martin, E. A.	48	Pull, J. A.	10	Taylor, W. H.	498
Martin, H.	403	Pullar, A. W. D.	71	Teasdale, A. E.	250, 270
Martin, J. A.	9	Radcliffe, S.	10	Tenerbaum, M. R.	170
Martin, T. L.	476	Randall, W. F.	107, 283	Tennant, James	403
Masek, E. L.	35	Ratcliffe, R.	498	Thomas, A. F.	186, 250
Mason, C.	89	Raven, R. T.	340	Thomas, L. A.	454
May, Walter	250	Reavell, Brian N.	35, 89	Thompson, E. R.	270
May, W. A. H.	270	Reavell, J. Arthur	250	Thompson, G. P.	155
Mayer, H. C.	71	Reavell, Lt.-Col. K.	170	Thompson, John F.	126, 340
McAweeny, Francis A.	89	Rearwin, Earle W.	107	Thornley, W. G. F.	10
McBride, W. J.	314	Reddell, A. E.	355	Thornton, J. H.	340
McCarthy, Dr. P. G.	250	Redfern, W. E. A.	170	Thurgood, B. A.	89
McFadzean, Sir William	89	Renn, F. A.	107	Thynne, D. S. S.	314
McGeogh, Percy W.	314	Richardson, C. G. H.	355	Tilley, S. V.	126
McHugh, T.	340	Richardson, P. C.	250	Todd, A. L. Stuart	355
McLaughlin, R. Samuel	498	Richardson, G. W. H.	340	Tomlinson, F. W.	250, 355
McNeile, D. H.	10	Richmond, T.	170	Tortle, L. G.	296
McNeill, C. B.	403	Ricketts, L. E.	355	Townsend, E. L.	314
McNeill, H.	296	Rider, G. A.	423	Tromans, B.	476
McQuillan, Prof. A. D.	314	Riddle, J. D.	107, 283	Tuffin, W. J.	440
McVeigh, J. C.	10	Rimmer, M. T.	9	Turner, J. M.	186
Mead, J. C. G.	296	Riscoe, V. S.	89	Turner, L. C. W.	9
Medows, F.	250	Ritchie, J.	520	Turner, R. H. S.	498
Meigh, A. C.	9	Roberts, B.	35	Tyrrill, J. J.	498
Meigh, C. H.	209	Roberts, Sir Peter	250, 270	Varley, J.	209
Melville, Richard	520	Robinson, A. G.	89	Vaughan, E. J.	9
Meuron, Dr. A. de	440	Robinson, K. A.	498	Vaughan, John G.	89
Milburn, A. S.	296	Robinson, J. W.	186	Vaughton, W. J.	340
Miles, A. B.	440	Robinson, P. W.	403	Verrill, Earl of	10, 107, 283
Miller, A. O.	296	Roby, J. R.	89	Vick, Dr. F. A.	155
Miller, H. J.	126	Rodwell, E. W.	35	Vickers, G.	186
Miller, R. J.	383	Roe, W. L.	403	Vickers, R. H.	476
Miller, R. T.	71	Rogister, J. J. A.	9	Vincent, F. G.	270
Mills, Frank J.	383	Roitt, E.	9	Viner, Ruben	440
Mitchell, John R.	340	Rollinson, G.	476	Walker, H.	476
Mockridge, H. C. F.	170	Rootes, Hon. Geoffrey	403	Walker, J.	314
Montgomerie, R. S.	340	Roper, D. L.	296	Wardman, C. T.	250
Montague, Theodore G.	440			Waring, Sir Douglas	270
Moore, Charles A.	340			Waring, H. W. A.	71
Moore, C. E.	340				

	PAGE
Watkins, Richard R.	126
Watson, Dr. J. H.	340
Watson, S.	71
Watson, W. L.	454
Wattsworth, C. D.	10
Weaver, C.	454
Webb, J. L.	383
Webster, A. J.	155, 383
Weigel, M. P.	9, 340
Weir, Viscount	48, 71
Weir, W. K. J.	89
Welch, N. G.	423
Wentworth, W. H.	35
West, Dr. E. G.	340
West, K. E.	35
Wharrad, C.	340
Wheeler, C. R.	71, 89
Wheeler, Edgar H.	454, 476
Whipple, G. A.	440
White, B.	107
White, Robert	498
Widdowson, J. R.	340
Wild, Dr. W.	520
Wilford, A. T.	250
Willey, J. M.	383
Williams, A. E.	476
Williams, A. R. O.	383
Williams, C. D. B.	340
Williams, F. I. B.	296
Williams, G. J. B.	250
Williams, J. M.	340
Williamson, D. T. N.	71
Wilson, J. F.	498
Wilson, Dr. L. S.	440
Wilson, N. H.	383
Wilson, R. H.	170
Winham, H. W.	454
Wise, M.	403
Wolff, James D.	355
Woodson, J. B.	498
Woodley, D. S.	48
Woods, H.	498
Woodridge, Stanley	48
Woollett, J. L.	498
Worster, A. J.	10
Wortley, F.	107, 423
Wrangham, C. E.	423
Wright, Dr. J. C.	71
Wrightson, Sir John	285
Yokote, Y.	250
Young, Gerard	48
Young, Miss E. M.	

SOCIETIES AND INSTITUTES

Aluminium Development Association	113, 115, 187, 302, 464, 524
American Electroplaters' Society	152
American Society for Testing Metals	270, 393, 503
American Zinc Institute	232
Association of Bronze and Brass Founders	174, 214, 301, 343, 381, 482
Association of Tar Distillers	228
Battelle Memorial Institute	149, 209, 413
Birmingham and Midland Institute	55
Birmingham Metallurgical Society	34, 108, 193, 194, 255, 443
Birmingham Productivity Association	54, 93, 154, 174
British Bronze and Brass Ingot Manufacturers' Association	235
British Cast Iron Research Association	320
British Compressed Air Society	254
British Iron and Steel Research Association	31, 114, 462
British Non-Ferrous Metals Research Association	321, 401, 455
British Standards Institution	112, 125, 212, 213, 228
British Welding Research Association	442
Copper Development Association	302, 422, 461
Electron Microscopy Group	302
European Committee of Foundry Associations	343
Fire Protection Association	155
Gauge and Tool Makers' Association	233
Industrial Training Council	461
Industrial Welfare Society	34, 302
Institute of British Foundrymen	54, 214, 423, 438
Institute of Metal Finishing	75, 153, 174, 192, 397, 415, 436
Institute of Metals	133, 135, 153, 255, 283, 315
Institute of Office Management	214
Institute of Physics and The Physical Society, The	31, 233, 322, 382, 463, 522
Institute of Welding	114, 133, 421
Institution of Electrical Engineers	193
Institution of Electronics	402
Institution of Engineering Inspection	301
Institution of Metallurgists	254
Institution of Plant Engineers	195
International Association for Cybernetics	255
Iron and Steel Institute	255
Lead Development Association	403, 421

Machine Tool Industry Research Association	461
Metal Finishing Association	235, 403, 462
National and Midland Ironfounders' Association	482
National Association of Non-Ferrous Metal Merchants' Golfing Society	195, 321, 482
National Association of Non-Ferrous Scrap Metal Merchants	33, 381, 502, 503
National Federation of Scrap Iron, Steel and Metal Merchants	402
Non-Ferrous Club	73, 113, 135, 215, 322, 441, 481, 521
Powder Metallurgy Joint Group	74
Purchasing Officers' Association	135
Royal Institute of British Architects	153
Royal Institute of Chemistry	461
Royal Society for the Prevention of Accidents	463
Royal Society of Arts	380
Scientific Instrument Manufacturers' Association of Great Britain	253
Society for Analytical Chemistry	383
Society of Chemical Industry	54, 154, 214, 234
Society of Instrument Technology	54
Society of Non-Destructive Examination	301
Tin Research Institute	34, 173, 235, 380
Zinc Alloy Die Casters' Association	133, 274
Zinc Development Association	113, 381, 382

INDUSTRIAL NOTES AND NEWS

Ad. Auriema-Europe S.A.	461
AEI-Birlec Ltd.	235
AEI Lamp and Lighting Co. Ltd.	302
AEI Radio and Electronic Components Division	174
Aerostyle Ltd.	380
Air Automation	503
Air Industrial Developments Ltd.	378
Albright and Wilson (Mfg.) Ltd.	34, 134, 194, 219, 341, 378
Alcan Industries Ltd.	54, 522
Alcan 114, 213, 233, 342, 481, 503, 521	
Alcan Malayan Aluminium Co. Ltd.	307
Alkan Ltd., M. L.	119, 378, 524
Alloy Pressure Die Products Ltd.	194, 231
Alumin Ltd.	153
Aluminium Company of America	195
Aluminium Company of Canada Ltd.	483
Aluminium-Industrie-Aktiengesellschaft	302
Aluminium Laboratories Ltd. (Canada)	246
Aluminium Ltd.	113, 119, 407
Aluminium Wire and Cable Company Ltd.	34
Amalgamated Metal Corp.	407
Amber Chemical	444
Amber Group of Companies	462
Amubco Ltd.	152, 174
American Machine and Foundry Co.	420
American Metal Climax Incorporated	279
American Western Metal Exposition	381
Anaconda Aluminium Co.	363
Anti-Artition Metal	327, 347
A.P.V. Company Ltd.	407
Ardal and Sumdal Verk	195, 407
Armstrong Whitworth (Metal Industries) Ltd.	342, 427
Arnytag and Sons Ltd.	441
Ashmore, Benson, Pease and Co. Ltd.	73
Associated Electrical Industries Ltd.	31, 72, 234, 322, 361, 482
Aston Aluminium Warehouses Ltd.	427, 523
Audco Ltd.	302
Aveley Electric Ltd.	301, 343, 522
Ayrshire Dockyard Co. Ltd.	91, 255
Ayrshire Metal Products	255
Baldwin Industrial Controls	31
Ballard Ltd., K. A.	234
Balzars, A.G.	394
Bardahl Products Ltd.	275
Barker Bros. Ltd.	199
Battersea College of Technology	113, 521
B.B.C.	195
Beck Ltd., R. and J.	195
Bennett Chemicals, D. G.	195
Berk and Co., F. W.	219, 279, 327, 361, 378, 483
Bertram and Son Ltd.	94
Baxter, Fell and Co. Ltd.	427
Birmingham News from	443, 464, 484, 502, 524
Birmingham Tool and Gauge Co. Ltd.	253
Bisichi Tin (Nigeria)	347
Bliss Company, E. W.	480
Bolton and Sons Ltd., Thos.	179, 274, 307, 356
"Books for Industry" Exhibition	195
Booth Aluminium Ltd., James	301, 323, 341
Borough Polytechnic	114, 233, 461, 482
Boulton Paul Aircraft Ltd.	188
Bow Ltd., R. and J.	194
Brightside Foundry and Engineering Co. Ltd.	34, 73
British Aluminium Co. Ltd., The	34
94, 114, 119, 193, 233, 381, 421, 422, 441	
British Engineers' Association Handbook	441
British Furnaces Ltd.	343
British Insulated Callender's Cables Ltd.	74, 193, 213, 235, 381, 411, 422

British Metal Corporation	134
British Oxygen Co. Ltd., The	4, 54, 79, 93, 193, 194, 423, 443, 463, 483
British Pressure Diecasting and Engineering Co.	387
British Rollmakers Corp.	259
British Rototherm Co. Ltd.	75, 502
British Tin Investment Corp.	199
British Trade Fair	363
Brockhouse and Co. Ltd., J.	55
Broken Hill Companies	179
Brook Engineering Co. Ltd.	155, 173
Brookhirst Igranite	503, 504
Brown Industries Ltd. David	33, 194
Bullock and Sons Ltd., Alfred	47, 343, 504
Bulpins (Svan Brand) Ltd.	327
Bureau International de la Récupération	15
California Institute of Technology	354
Cambridge Instrument Co. Ltd.	31, 73, 219
Canning and Co. Ltd., W.	45, 213, 214, 297, 302, 311, 327, 367, 378
Carrs Paints Ltd.	378
Castrol Industrial Ltd.	301
Causeway Reinforcement Ltd.	321, 441
Celtic (Leicester) Distributors Ltd.	214
Centro Leghe Leggeri AIM	193
Cerro de Pasco Corporation	179, 383
Chamberlain Industries Ltd.	443
Chance Vought	50
Chromalloy Corporation	49
CIBA (A.R.L.) Ltd.	92, 268, 342
Clifford Ltd., Charles	259, 481
Cohen 600 Group, George	179, 522, 524
Coil Spring Federation	343
Coldpoint Drills Ltd.	395
Coley Metals	427
College of Advanced Technology, Birmingham	442, 482
Colvilles Ltd.	134
Commonwealth Technical Training Week	422, 443
Consolidated Tin Smelters Ltd.	194
Consolidated Zinc Corporation Ltd.	133, 343, 444
Cooper and Turner Ltd.	382
Cornigliano S.p.A.	497
Corrosion Technical Services Ltd.	174, 268
Cosley Buildings	444
Council of Industrial Design	301
Courburn Supplies Ltd.	175
Croda Organisation Ltd.	94
Crompton Parkinson (Stud Welding) Ltd.	267, 421
Cruickshank Ltd., R.	378, 423
Dallow Lambert and Co. Ltd.	301
Davy and United Engineering Co. Ltd.	34, 213
Davy-Ashmore Export Co.	99, 113
Dawe Instruments Ltd.	31
Daystrom Ltd.	227
Dechema	174, 213
Delapena and Son Ltd.	234
Delta Group of Companies	323, 341, 441
Dens Metal (Dundee) Ltd.	73
Department of Scientific and Industrial Research	13, 35, 166, 215, 374
Desoutter Brothers (Holdings) Ltd.	381
Deutsch & Brenner Ltd.	113, 153
Dewhurst, E. V.	209
Dewrance and Co. Ltd.	321
Diversey (U.K.) Ltd.	93, 195, 379, 462, 482
Dowding and Doll Ltd.	115
Drayton Controls Ltd.	461
Earle, Bourne and Co. Ltd.	174, 206
Easterbrook, Allard and Company Ltd.	134
Edmonds, George	199
Educational Productions Ltd.	381
Edwards High Vacuum Ltd.	31, 235, 301
Edwards Ltd., F. J.	463
Elco Furnaces Ltd.	74, 362
Electrical Development Association Ltd.	322
Electrical Engineers' Exhibition	73
Electro-Chemical Engineering Co. Ltd.	53, 362, 401, 422
Electronic Switchgear (London) Ltd.	401
Electrothermal Engineering Ltd.	342, 395
Elektrokemisk A.S.	347
Elliott-Automation Ltd.	93
Elm Engineering Ltd.	173
E.M.B. Co. Ltd.	381
Enfield Rolling Mills Ltd.	441, 443, 515
Engelhard Industries Ltd.	73, 379
Engineering Appliances Ltd.	268
Engineering Laboratory Equipment Ltd.	253
Engis Ltd.	150
English Electric Co. Limited, The	6, 159
Esso Petroleum Co. Ltd.	235
Ether Ltd.	215, 232
Evered and Co.	347
Evode Group	482
Exhibition of Instruments and Controls	253
Fairmont Aluminium Company	255
Fafnir Bearing Co. Ltd.	274
Falck, A. F. L.	497
Faulkner, R.	342
Federation of British Industries	302, 322
Fenlow Electronics Ltd.	212
Ferro Enamels Ltd.	7
Fescol Ltd.	259, 303, 341
Fielding and Platt Ltd.	301
Finishing Aids and Tools Ltd.	402
Firth Cleveland Group, The	13, 53, 464
Firth Cleveland Tools Ltd.	14, 53, 188

	PAGE		PAGE		PAGE
Fischer, A.G. Georg	497	Kestner Evaporator and Engineering Co. Ltd.	253	Revere Copper and Brass Inc. (U.S.A.)	259
Fleischmann (London) Ltd.	93, 504	Killinghall Tin	367	Reynolds Metals Co.	73, 179
Flexibox Ltd.	253, 503	K.S.M. Stud Welding Ltd.	439	Reyrolle and Co., A.	307
Follisain	279	Kummler and Matter	496	Rhodes and Sons Ltd., Joseph	439
Fosco-Fordath Ltd.	321	Laboratory Apparatus and Materials Exhibition	303	Rhodesian Selection Trust	119, 347
Foundry and Metallurgical Equipment Co. Ltd.	91, 148, 442	Lancashire Dynamo Electronic Products Ltd.	75, 113	Richardson and Sons Ltd., R. J.	361
Fuller's Earth Union Ltd.	234	Lapper Equipments Ltd.	33	Rio Tinto Co. Ltd., The	322
Garringtons Ltd.	73, 193, 322, 401, 483	Lee and Sons, Arthur	19	Rockwell Ltd.	255, 463
Geigy Co. Ltd.	421	Leipzig Fair	54	Rolls-Royce Ltd.	322
General Electric Co. Ltd., The	34, 253, 302, 361, 461	Lewis and Co. Ltd., Ernest A.	133	Roto-Finish Ltd.	275, 380, 504, 523
General Ind Investments	189, 502	Light and Co. Ltd., L.	462	Rovetta Baldo	394
Gilbert (Industrial) Ltd., G. and R.	211	Light Metals Congress	522	Royal Aircraft Establishment	482, 519
Glacier Metal Co. Ltd.	422	Lindberg Engineering Corporation	269	Royce Electric Furnace Ltd.	113, 255, 273
Glynwed Tubes Ltd.	327, 427	Lintott Engineering Ltd.	74	Rubery Owen and Co. Ltd.	74, 323
Goulding and Partners Ltd.	151	Loewy Engineering Co. Ltd.	443, 502	Rushworth and Co. (Sowerby Bridge) Ltd.	51, 520
Grant and West Ltd.	502	Lombard and Sons Engineering Ltd., D. L.	322	Russell Constructions Ltd.	522
Grauer and Weil Ltd.	379	London Aluminum Co. Limited	403	Safety Products Ltd.	33
Griffith and George Group	31, 174, 383, 483	London Electric Wire Co. and Smiths Ltd.	114	Salter and Co. Ltd., Geo.	274
Griffiths (Smethwick), A. E.	19	London Metal Exchange	73, 213, 336	Schloemann Aktiengesellschaft	53, 173, 322
Guest, Keen and Nettlefolds Ltd.	73, 343	London Metal Warehouses Ltd.	483	Scottish Aviation Ltd.	302
G.W.B. Furnaces Ltd.	15, 115, 174, 484, 516	Lucas (Electrical) Ltd., Joseph	29	Scottish Stamping and Engineering Co. Ltd.	302
Hadifields Ltd.	173	Lydenburg Platinum	219	Servomex Controls Ltd.	245
Hanson-Van Winkle-Munning Company	91	Madan and Co. Ltd., Charles S.	252	Shandon Scientific Co. Ltd.	152
Harrison (Birmingham) Ltd.	347	Manganese Bronze and Brass Co. Ltd.	14, 74, 347, 484	Shaw Moisture Meters	195
Harshaw Chemicals Ltd.	274	Materials Research Corporation	90	Silvercrown Ltd.	380
Harvey Aluminum Inc.	427	Mellor Ltd., H. and T.	189	Simon Ltd., Henry	441
Harvey and Co. (London) Ltd., G. A.	154, 523	Metachemical Processes Ltd.	63	Smith Industrial Division	442
Hawker Aircraft Ltd.	3, 27	Metal Agencies Co.	387	Solar Weld Language Ltd.	211
Hawker Marris	387	Metal Bulletin	401	Solarlon Laboratory Instruments Ltd.	35
Hawley and Co. (Walsall) Ltd., John	379	Metal Castings Ltd.	363	South African Atomic Energy Board	74
Head Wrightson Processes Ltd.	193	Metal Powder Industries Federation	73	Spartan Steel and Alloys Ltd.	381
Head Wrightson Teesdale Ltd.	195	Metal Products Co. (Willenhall)	407	Standard Resistance Welders Ltd.	355
Headland Engineering Developments Ltd.	343	Metallisation Ltd.	90	Standard Telephones and Cables Ltd.	273
Headland, Thos. P.	275	Metal Industries Ltd.	159	Star Aluminum Co.	133
Hedin Limited	401	Metal Spinners (Newcastle) Ltd.	335	Stedall and Co. Ltd.	442
Hellermann Ltd.	361	Metallurgical Services	92, 233, 502	Stedall Machine Tool Co.	523
Herbert Ltd., Alfred	503	Metals Research Ltd.	31	Stevens Co. Limited, H. G.	33
High Duty Alloys Ltd.	114	Miles Ltd., Alf'd	154	Strauss and Co. Ltd., A.	523
Higer and Watts Ltd.	31, 423	Ministry of Labour	193	Stream-Line Filters Ltd.	15
Hills Precision Die Castings Ltd.	302, 391	Modern Furnaces and Stoves Ltd.	126	Suffolk Iron Foundry (1920) Ltd.	33, 55
Hird-Brown Ltd.	93, 189	Mole and Son, M.	99, 199	Swain Ltd., Matthew	87
Hockley Chemical Co. Ltd.	379	Mond Nickel Co. Ltd., The	55	Swale Chemicals Ltd.	441
Holmes and Co. Ltd., W. C.	341, 503	Monometer Manufacturing Co. Ltd.	74	Teal and Holmes Ltd.	173
Honeywell Controls Ltd.	269, 303, 341, 342, 421, 422, 442, 463	Morgan Crucible Company Ltd.	32, 74, 464	Techné (Cambridge) Ltd.	192
Hooker Ltd., R. J.	175	Morgan Crucible Group	114	Telcon Metals Ltd.	32, 194, 274
Ideal Homes Exhibition	75	Morgan Refractories Ltd.	33	Telegraph Condenser Co. Ltd.	214
Imperial Chemical Industries Ltd.	14, 15, 74	Morganite Crucible Ltd.	255	Thermal Syndicate Ltd., The	32, 159
Incandescent Heat Co. Ltd.	119, 303	Morris and Son (Bham) Ltd., William	403	Thomas and Baldwins Ltd., Richard	380, 503
Industrial Equipment and Services Exhibition	301	Morris Ltd., B. O.	151, 379, 382	Thomas Industrial Automation Ltd.	51, 151
Industrial Finishes Exhibition	13, 233, 378	Murcott and Sons Ltd., J. V.	69, 147, 269	Tighman's Ltd.	380
Industrial Furnaces Ltd.	439	Nash and Thompson Ltd.	32, 153	Tretol Ltd.	134
Industrial Synthetics Ltd.	268, 303	National Council for Technological Awards	73, 435	Triulzi	214
Industrial Synthetics (Overseas) Ltd.	303	National Engineering Laboratory	73, 435	T.S. Precision Engineering Ltd.	188
Instrom Ltd.	342	National Industrial Fuel Efficiency Service	153, 173, 361, 482	Tube Investments Ltd.	54, 93, 193
Interlas Ltd.	14, 52, 269	National Industrial Safety Conference	343	Tube Products Ltd.	523
International Congress on Electro-Heat Corrosion	253	National Lead Company	159	Turner Brothers Asbestos Co. Ltd.	234
International Construction Equipment Exhibition	215, 234	National Physical Laboratory	383	Twin Coach Company	295
International Light Metals Conference	54	Newman Industries Ltd.	441	Tyler and Co. Ltd., E. W.	381
International Nickel Company	402	Newman's Tubes	407	Ultrasonoscope Co. (London) Ltd.	32
International Nickel Company (Mond) Ltd.	173, 174, 461	North Eastern Gas Board	459	Unicam Instruments Ltd.	32
International Nickel Co. of Canada Ltd.	19, 199, 254, 407	North Western Gas Board	126, 233	Union Carbide Corporation	173
International Plastics Exhibition and Convention	502	Norton and Co. Ltd., Sir James Farmer	343, 441	Union Minière	427
International Tin Council	441	Norton Industries	219	United Flexible Metallic Tubing Co. Ltd.	522
International Wrought Non-Ferrous Metals Council	234, 521	Nuclear Developments Ltd.	322	United Kingdom Atomic Energy Authority	10, 75
Irish Aluminium	219	Olin Mathieson Chemical Corporation	235	U.S. Bureau of Mines	107, 146, 170, 268, 319, 394
Jaguar Cars Ltd.	45	Omni (London) Ltd.	90	U.S. Industries Inc. (Great Britain) Limited	13
Johnson and Nephew, Richard	484	Opperman Gears Ltd.	461	Vacuum Metallurgical Developments Ltd.	245
Johnson and Starley Ltd.	522	Paris, News from	503	Vacuum Techniques	263
Johnson, Matthey and Co. Ltd.	173	Parkes and Sons, Josiah	327	Vaughan Associates Ltd.	52
Journal of Applied Pneumatics	194, 233, 302, 374, 379, 403, 443, 461, 341	Parr, G. H.	209	Venezeta Plywood Ltd.	114
Joy-Sullivan Ltd.	463	Patent Die-Castings Co. Ltd.	133	Verzinkerei Pratteln A.G.	496
Kaiser Aluminum and Chemical Corp.	13, 34	Pathe (Engineers) Ltd., P. M.	199	Vickers Group of Companies	341
Keelavite Hydraulics Ltd.	92, 175, 179, 303, 322, 343, 395, 427, 521	Paul (Molybdenum Disulphide) Ltd., K. S.	303	Vitreous Enamel Development Council	461
Keeton Sons and Co. Ltd.	33	Peebles and Co. Ltd., Bruce	303, 382	Ward Ltd., Thos. W.	441, 444
Keith Blackman Ltd.	524	Petaling Tin	199	Weldcraft Ltd.	115
Kenilworth Manufacturing Co. Ltd.	93	Pike Trailer Co.	481	Welding Improvements Ltd.	194
Kennecott Copper Corporation	367	Plus-Gas Co. Ltd.	275	Wellman Smith Owen Engineering Co.	259
Kent Ltd., George	26, 147, 323	P.M.D. Chemicals Ltd.	464	Westinghouse Brake and Signal Co. Ltd.	135, 153, 159, 179, 195
		Power Jacks Ltd.	188	Wickman Ltd.	383
		Pye Ltd.	233, 422	Wiggin and Co. Ltd., Henry	92
		Pye and Co. Ltd., W. G.	32	Widbarfield Electric Furnaces Ltd.	34, 381
		Pyrene Co. Ltd.	79, 461	Williams and Sons (Holdings), W.	387
		Radyne Ltd.	502	Wilmot Breeden Ltd.	419
		Rapid Magnetic Ltd.	107, 440	Winfield Rolling Mills Ltd.	79
		Ratcliffs (Great Bridge)	327	Winston Electronics Ltd.	133
		Reay Brass Foundry Co. Ltd.	323	Wire Drawers (Midlands) Ltd.	394
		Research and Control Instruments Ltd.	133, 303	Worswick (Engineering) Ltd., Alan	70
				Wright, Bindley and Geil	19
				Yale and Towne	361
				Yorkshire Engineering Supplies Ltd.	459

METAL INDUSTRY

THE JOURNAL OF NON-FERROUS METALS

EDITOR • L. G. BERESFORD, B.Sc., F.I.M.

MANAGING DIRECTOR: ARTHUR B. BOURNE, C.I.Mech.E.

index to volume 99

JULY TO DECEMBER 1961

FIFTY-SECOND YEAR OF PUBLICATION

Reference Table

PAGE	ISSUE	PAGE	ISSUE
1—20 ..	7 July	261—292 ..	6 October
21—40 ..	14 July	293—312 ..	13 October
41—60 ..	21 July	313—332 ..	20 October
61—80 ..	28 July	333—352 ..	27 October
81—100 ..	4 August	353—372 ..	3 November
101—120 ..	11 August	373—392 ..	10 November
121—140 ..	18 August	393—412 ..	17 November
141—160 ..	25 August	413—432 ..	24 November
161—180 ..	1 September	433—452 ..	1 December
181—200 ..	8 September	453—472 ..	8 December
201—220 ..	15 September	473—492 ..	15 December
221—240 ..	22 September	493—512 ..	22 December
241—260 ..	29 September	513—532 ..	29 December

Editorial Offices: 9 Charlotte Street, Birmingham 3.

Advertising and Publishing Offices: Dorset House, Stamford Street, London, S.E.1

Published Weekly on Fridays: Price One Shilling.

Annual Subscription Rates: Home, £3 7s. 6d., Overseas, £3 12s. 0d. Canada and U.S.A., \$10.00. Subscription includes one copy of METAL INDUSTRY HANDBOOK published annually.

PUBLISHED BY ILIFFE PRODUCTION PUBLICATIONS LIMITED DORSET HOUSE STAMFORD STREET LONDON, S.E.1

Index to Volume 99

ARTICLES		PAGE			PAGE
Acid Gold Plating	90		Cable Sheathing	210	
Alloys, High Damping	341		Cummins, W. R.	210	
Aluminium Alloys, Continuous Casting of	82, 102, 132		Freund, A. O. F.	210	
Aluminium Alloy L 65	182		"I'm Dreaming of a Right Rest Mass"	497	
Aluminium Alloys in Marine Environments	454		Oldroyd, James	210	
Aluminium Anodized	242		Sublimation of Metals	210	
Aluminium Billets, Cutting Large	400		Titanium Carriers	210	
Aluminium Bronze and Hardener Alloys, Melting	222		West, E. G., Dr.	344	
Aluminium Coated Strip	104		Corrosion	294, 318	
Aluminium for Architects	72		Corrosion, Galvanic	461	
Aluminium, Mechanized Heat-Treatment of	499		Cost Control in Gravity Die-Casting	414, 443	
Aluminium, Pressing	2, 26		Cutting Large Aluminium Billets	400	
Aluminium Rolling in New Zealand	441		Damping Alloys, High	341	
Analytical Standards	147		Deformation and Fracture	265	
Anodized Aluminium	242		Detection, X-ray Flaw	185	
Anodized Aluminium, Bright	494		Die-Cast Magnesium Saw	187	
Anodizing in Italy	481		Die-Casting, Cost Control in Gravity	414, 443	
Australian Zinc and Lead	464		Die-Castings in the Borg-Warner Automatic Transmission	514	
Automatic Shell Moulding	207		Die Design for Gravity Die-Casting	374, 401	
Bath Heating	12		Die Design for Pressure Die-Casting	354	
Belgian Non-Ferrous Metals Industry	270		Disc Calculator for Radiologists	190	
Beryllium, Metallurgy of	437		Discharge, Explosive Forming by Electrical	12	
Borg-Warner Automatic Transmission, Die-Casting for	514		Double-Drawn Cans from Pre-Coated Aluminium Strip	474	
Book Reviews:—			Effluent, Treatment of Process	168	
"Analyse der Metalle" Vol. II, Betriebsanalyse. Published by Springer-Verlag	521		Effluent, Treatment of Works	47	
"Cold Forging of Steel." By Dr. Ing. H. D. Feldman	150		Elasticity of Metals, High Pressure	150	
"Control of Airborne Dust." By W. D. Bamford	521		Electric Heating for Non-Ferrous Metals	314, 334, 361, 383	
"For the Years to Come." Re. International Nickel Co. of Canada	30		Electrodes, Spark Erosion	434	
"Industry and Careers." Edited by D. E. Wheatley	85		Electrolytic Smoothing	44	
"Industrial Furnaces." Vol. I. By W. Trinks and Matthew Mawhinney	336		Engineering Materials and Design Exhibition	421	
"Lead and Lead Alloys for Cable Sheathing." By S. A. Hiscock	149		Erosion Electrodes, Spark	434	
"Metal-Reinigung und Entfettung." ("Metal Cleaning and Degreasing." By Dr. Ing. A. Pollack and Dr. Ing. P. Westhal	248		Evaluating Sheet Fracture Toughness	436	
"Minerals for the Chemical and Allied Industries." By S. J. and M. G. Johnstone	521		Explosive Forming by Electrical Discharge Extrusion, Hydrostatic	12, 208	
"Modern Furnace Technology." By H. and G. Etherington	44		Farnborough, 1961	172	
"Nickel-Chrome Plating." Published by Robert Draper Ltd.	397		Finishing, Vibratory	343	
"Opportunities for Graduates, 1962, Directory of"	521		Fluidized Bed Plastics Coatings	46	
"Physical Metallurgy of Rolling." By F. H. Scott	149		Foundry Sands, Measuring Moisture Content of	122	
"Spectral-Isotopic Method for the Determination of Hydrogen in Metals." By A. N. Zaidel, A. N. Petrov and G. V. Veinberg	149		Friction Welding Developments	51	
"Toughness and Brittleness in Metals." "X-ray Metallography." By A. Taylor	248, 32		Fume Cleaning	92	
Brass Rod Mill, New	62, 87		Furnace Research and Development	42	
Bright Annealing Copper Wire and Strip	186		Galvanized Strip Production	69	
Bright Anodized Aluminium	494		Galvanic Corrosion	461	
Buhler Brothers Centenary Building Exhibition, The	32, 408		Galvanizing Conference, Sixth International	9	
Calorimetric Thickness Measurements	124		Gold Plating, Acid	90	
Casting, Investment	337		Gravity Die-Casting, Cost Control in	414, 443	
Casting Titanium Shapes	202		Gravity Die-Casting, Die Design for	374	
Casting and Rolling Line, Continuous Strip	22, 45		Heat-Treatment of Aluminium, Mechanized	499	
Casting the Volga Cylinder Block	105		High Damping Alloys	341	
Castings, Copper Alloy	477		High Density Sand Moulds	170	
Cerium	152		High Pressure Elasticity of Metals	150	
Chemical Analysis	338		High Purity Metals	336	
Chemical Deposition of Platinum Metals	339		High Reflectivity Colour Finishes	417	
Chromate Coatings	397		Hydrostatic Extrusion	208	
Coatings, Chromate	397		Investment Casting	337	
Cobalt	70		Katanga, Copper in	394, 423	
Cobalt, Research on	498		Large Die-Forged Propeller Blade	209	
Colour Finishes, High Reflectivity	417		Lead and its Alloys	459, 483, 502	
Continuous Casting of Aluminium Alloys	82, 102, 132		Lead, Australian Zinc and	464	
Continuous Inspection of Rolled Strip	151		Lead-Coated Steel	419	
Continuous Strip Casting and Rolling Line	22, 45		Lead, Refining	110, 124, 146	
Controlling Low Oil Flow Rates	190		Low Oxide Copper Alloys	5	
Copper Alloy Castings	477		Low Oil Flow Rates, Controlling of	190	
Copper Alloy Ingots	229		Low Stress Rhodium Plating	128	
Copper Alloy, Low Oxide	5		Machinable Carbide Dies Cut Production Costs	190	
Copper in Katanga	394, 423		Magnetic Separation	484	
Copper Wire and Strip, Bright Annealing	186		Measuring Moisture Content of Foundry Sands	122	
Correspondence:—			Metal Fatigue, Protection Against	378	
Anodizing Aluminium	344		Metaloceramics	399	
Barton, Hiram	497		Metals in Space Technology	519	
			Melting Aluminium Bronze and Hardener Alloys	222	
			Melting Zinc Alloys	376	
			Metal Cleaners	212	
			Metal Finishing Data	252	
			Metallurgy of Beryllium	437	
			Metals in Industry	421	
			Moisture Content of Foundry Sand, Measuring	122	
			Multi-Cell Plating for Wheel Rims	357	
			New Brass Rod Mill	62, 87	
			Non-Ferrous Metals in Missiles	162	
			New Plant and Equipment:—		
			Billet Shearing	403	
			Cutting-Off	129	
			Diamond Lapping	49	
			Dust Control	231	
			Feeding Processes	231	
			Flash Welding	403	
			Hand Welding	505	
			Heat Control	50	
			Irregular Pressings	129	
			Liquid Chilling	504	
			Magnetic Separation	504	
			Oil Recovery	231	
			Orbital Welding	130	
			Portable Cutter	129	
			Process Heating	49	
			Stress Analysis	49	
			Vacuum Brazing	504	
			Vacuum Sintering	403	
			New Thermocouple	24	
			New Zealand, Aluminium Rolling in	441	
			Nickel Data	145	
			Obituary:—		
			Cryer, L. H.	12	
			Gregory, Dr. Edwin	402	
			Gwyer, Dr. A. G. C.	12	
			Hammond, Dr. E.	51	
			Knight, Harry	300	
			McGowan, Lord	51	
			MacMillan, R. D.	416	
			Pipe, E. L.	85	
			Robinson, L. B.	51	
			Sandland, G. E.	51	
			Thompson, H. J.	479	
			Thompson-Schwab, F.	479	
			Wolff, J. D.	134	
			Wood, A. C. W.	436	
			Out of the Melting Pot	8	
			25, 52, 68, 86, 113, 131, 148, 169, 189		
			211, 230, 250, 262, 298, 321, 342, 360		
			382, 398, 420, 440, 462, 480, 501, 523		
			Oxygen in Titanium	436	
			Parliamentary News	448, 508	
			Platers' Problems	340, 377, 463	
			Plating for Wheel Rims, Multi-Cell	357	
			Plating Plumbers' Brassware	251	
			Platinum Metals, Chemical Deposition of	339	
			Plumbers' Brassware, Plating	251	
			Pre-Coated Aluminium Strip, Double-Drawn Cans from	474	
			Pressure Die-Casting, Die Design for	354	
			Processing Scrap	210	
			Propeller Blade, Large Die-Forged	209	
			Products and Processes:—		
			Aid to Metal Spraying	109	
			Cable Clamp for Service Connection	108	
			Casting Undercut Metal Moulds	525	
			Check Weighing Improves Zinc Slabs	380	
			Controlling Low Oil Flow Rates	190	
			Disc Calculator for Radiologists	190	
			Dual Channel Tube	7	
			Greater Production of Refractory Metals	7	
			Improving Edges of Strip	6	
			Induction Heating Process	6	
			Lapping Discs for Diamond Compounds	525	
			Lead-Polythene Mixture as Radiation Shield	381	
			Limiting Critical Vibration	524	
			Machinable Carbide Dies Cut Production Costs	190	
			Measuring Magnetic Susceptibility	524	
			Miniature Air Cylinder	108	
			Monitoring Thin Moving Objects	525	
			Oil-Fired Burner Cuts Foundry Costs	524	
			Pliable Lead Linings Protect Stackwork	381	
			Powder Metal Cam	108	
			Precision Device Aids Automation	190	
			Removing Ferrous Particles from Fluids	380	
			Resin for Core Blowing	6	
			Riveting in Difficult Situations	525	
			Safety in Gamma Radiography	109	
			Single Die-Castings for Two Components	191	
			Tribenzylamine in Metal Processes	6	
			Versatile Dust Control	380	
			Versatile Thermometer	7	
			Vertical Scale Thermometers Save Space	524	
			Properties of High Temperature Materials	245	
			Protect Your Premises	322	
			Protection Against Metal Fatigue	378	
			Purifying Argon	152	
			Recovery of Zinc and Tin from Secondary Products	226, 246	
			Refining Lead	110, 124, 146	
			Research on Cobalt	498	

	PAGE
Rhodium Plating, Low Stress	128
Fod Mill, New Brass	62, 87
Roller Strip, Continuous Inspection of	151
Rolling Line, Continuous Strip Casting and	22, 45
Sand Mounds, High Density	170
Scrap Processing	210
Separation, Magnetic	484
Sheet Fracture Toughness, Evaluating	436
Shell Moulding, Automatic	207
Single Die-Casting for Two Components	191
Sixth International Galvanizing Conference	9
Space Technology, Metals in	519
Spark Erosion Electrodes	434
Standard Specifications	72, 85, 112, 151, 229, 320, 344, 503
Stress Relieving	30
Strip, Aluminium Coated	104
Strip, Continuous Inspection of, Rolled	151
Strip Production, Galvanized	69

Terne Coated Strip	171
Thickness Measurement	252
Tin from Secondary Products, Recovery of	226, 246
Titanium Shapes, Casting	202
Titanium, Oxygen	436
Torsion Testing Small Specimens	384
Tube Straightening	71

Trade Publications:—

AEI-Birlec	216
Alcan Industries Ltd.	428
Armour Hess Chemicals Ltd.	256
Associated Lead Manufacturers Ltd.	216
Benton and Stone Ltd.	488
Booth Aluminium Ltd., James	488
Borax Consolidated Ltd.	488
British Resin Products Ltd.	368
Brooke Tool Manufacturing Co. Ltd.	287
Cambridge Instrument Co. Ltd.	16
Canning and Co. Ltd., W.	448
Cementation (Muffelite) Ltd.	488
Consolidated Beryllium Ltd.	348
Controlled Heat and Air Ltd.	36, 56
Croda Ltd.	368
Desoutter Group, The	368
Diemould Service Company Ltd.	348
Dowling and Doll Ltd.	36, 216, 428
Elco Furnaces Ltd.	16
Engelhard Industries Ltd.	448
Evershed and Vignoles Ltd.	287
Firth and John Brown Ltd., Thos.	448
Fletcher Miller Ltd.	287
Forgings and Presswork Ltd.	136
Foundry Suppliers Limited	348
Gas Council, The	16
Gauge and Tool Makers' Association	216
General Electric Co. Ltd.	348
Graphite Products Ltd.	36
Harvey and Co. Ltd., G. A.	287
Head Wrightson Machine Co. Ltd.	287
High Duty Alloys Ltd.	488
Holmes, W. C. and Co. Ltd.	56, 136
Imperial Aluminium Co. Ltd.	176, 256, 287, 448, 488
Imperial Chemical Industries Ltd.	116
Incandescent Heat Co. Ltd., The	216
Light and Company Limited, L.	56, 348
Magnesium Elektron Ltd.	368
Morgan Crucible Group	256
New Rochelle Thermatool Corporation	136
Non-Ferrous Metals	36
Old Park Engineering Limited	116
Optoshield Ltd.	287
Pantak Limited	368, 428
Powder Metallurgy Ltd.	176
Power-Gas Corporation Ltd., The	488
Production Engineering Research Association	136
Pyrone Company Ltd.	488
Rapid Magnetic Limited	136
Rorunda Ltd.	488
Ruberoid Company Limited	116
Stone Platt Industries Ltd.	256
Suffolk Iron Foundry (1920) Ltd.	176
Vokes Ltd.	36
Winstanley and Company (Kings Norton) Limited	136
Treatment of Process Effluent	168
Treatment of Works Effluent	47
Vibratory Compacting	167
Vibratory Finishing	343
Vibratory Handling	482
Welding Developments, Friction	51
Welding Thick Aluminium Plate	249
Works Visits:—	
Le Centre National de Recherches Métallurgiques	301
Mines et Fonderies de Zinc de la Vieille-Montagne	273
Société Générale Métallurgique de Hoboken	277
Société Anonyme Phenix Works	281
Visseries et Trefferies Réunies	299
X-Ray Flaw Detection	185
Zinc Alloys, Melting	376
Zinc and Lead, Australian	464
Zinc and Tin Recovery from Secondary Products	226, 246

EDITORIALS

A Bad Year	353
A Decision Deferred	333
Aluminium World Agreement?	413
Anodizing Today—and Tomorrow	221
Autumn Meeting	261
Current Welding Research	41
Dangerous Stagnation	81
Does It Pay Off?	393
Electric Heating	313
Experience Shared	293
Foundry Conditions	121
Galvanized Strip in Automobiles	21
Helping the Buyer	433
Industry and Education	373
Metals in Space	473
Mineral Processing	61
Ore Processing Research	141
Powder Metallurgy Standard Production Census	513
Research for Industry	161
Selling Metal	181
Service to Industry	201
Short-Term Prospects	493
Technical-Economic Forecasting	453
Tin Puzzle	241
Training for Management	101

AUTHORS

Beath, C. B.	142
Block, A. D.	122
Brand, H. W.	22, 45
Bryan, R. P.	354
Burley, H. A.	122
Carr, D. N.	417
Chambers, D. H.	226, 246
Cornall, P. N.	170
Cousins, C. A.	142
Diamond, M. J.	122
Doyle, W. M.	82, 102, 132
Everwyn, G.	394, 423
Goode, W.	374, 401
Gough, P. J. C.	434
Habraken, L.	301
Hardy, R. G.	202
Harper, R.	454
Holmes, J. F.	110, 124, 146, 459, 483, 502
Lengbridge, J. W.	2, 26
Merre, Marcel de	270
Sullivan, P. M.	226, 246
Schofield, M.	152
Sharpley, J. T.	314, 334, 361, 383
Simpson, W. M.	354
Westwood, R. J.	142
Woodward, R. R.	414, 443

METAL MARKET REPORTS AND PRICES

Industrial News	13
33, 53, 73, 93, 114, 134, 153, 173, 193	
213, 233, 253, 285, 305, 325, 345, 365	
385, 405, 425, 445, 465, 485, 506, 526	
Light Metal Statistics	76, 175, 387, 447, 507
Light Metal Statistics in Japan	76, 96, 115, 135, 154, 307, 406
Metal Market News	17
37, 57, 77, 97, 117, 137, 157, 177, 197	
217, 237, 257, 289, 309, 329, 349, 369	
389, 409, 429, 449, 469, 489, 509, 529	
Metal Statistics	55, 156, 347, 427, 528
Non-Ferrous Metal Prices	18
38, 58, 78, 98, 118, 138, 158, 178, 198	
218, 238, 258, 290, 310, 330, 350, 370	
390, 410, 430, 450, 470, 490, 510, 530	
Stock Exchange, The	20
40, 60, 80, 100, 120, 140, 160, 180, 200	
220, 240, 260, 292, 312, 332, 352, 372	
392, 412, 432, 452, 472, 492, 512, 532	

NEW COMPANIES

Alcob Metals (Portsmouth) Ltd.	36
Aldridge Rolling Mills Limited	116
Amalgamated Sprays Ltd.	428
Amey's (Stone) Down Ltd.	36
Angeley Copper Mines (U.K.) Ltd.	468
Aston & Co. Ltd., Frank	96
Bayswater Metal Supply Co. Ltd.	16
B.E.C. Construction Co. Ltd.	116
Bedford Plating Ltd.	328
Beryllium and Copper Alloys (Moulds and Dies) Ltd.	388
Brynmawr Metals Ltd.	368
Braemar Metal Co. Ltd.	468
Buffey's Metal Fabrication Co.	256
Camberley Metal Polishers Ltd.	176
Chard Street Metals Ltd.	388
Colmore Pressings Ltd.	16
Connard Metals Ltd.	388
Crossland and Sons Ltd., J. C.	468
Daisley Ltd., N. P.	468
Deansfield Plating Co. Ltd.	468
Delta Enfield Rolled Metals Limited	116
Dex Corrosion Control Ltd.	328
Digby and Sons Ltd., C. T.	56
Duke, T., & Co. (Polishers) Limited	116
Elmbridge Plating Co.	196
Export Metal Co. Ltd.	256
Ferrous and Non-Ferrous Limited	116
Finchley Metal Co. Ltd.	176
Fisher and Abel Ltd.	16
Freeman (Metals) Ltd., M.	36
G. and E. Aluminium Flashings Ltd.	176
G.L. Metal Co. Limited	96
Grant Castings Ltd.	36
Hampson Limited, John	368
Harco Castings Ltd.	368
Hayes and Co. Ltd., A. F.	176
Herve Sales Limited, L.	96
Ingram and Russell Ltd.	428
JCS (Pressings) Ltd.	196
J.K.B. Safes Ltd.	196
Jones (Feltham) Ltd., E.	468
King and Sons Ltd., A.	388
Lakedale Plating Co. Ltd.	328
Lamp Metals Ltd.	428
Larkinson (Far Cotton) Limited, F. C.	116
Larkinson (Peterborough) Limited, F. C.	96
Leema Ltd.	468
Lindley (Sheet Metal) Ltd., H.	256
Lugsdale Scrap Metal and Demolition Engineers Ltd.	428
Marshall King Ltd., H.	388
Maywood Metals Limited	16
Mercon Metals Ltd.	428
Metbark Ltd.	428
Metalcraft (Welwyn) Ltd.	16
Metal Disposals Ltd.	176
Metal Fabrication (Properties) Ltd.	368
M.S. (Electro-Plating) Ltd.	56
Mineral Enterprises Ltd.	388
Nathan Tin Stamping Ltd.	196
New Zealand Aluminium Co. Ltd.	388
Pearless Aluminium (Die-Castings) Ltd.	196
Powerworld Metals Ltd.	236
Pressfab Limited	16
Rampgill Mill Limited	236
Rock Ltd., Leonard P.	328
Rollet Aluminium Co.	256
Rundle and Son Limited, R.	116
Rutland Metals (Associates) Ltd.	56
Sargent (Polishers) Ltd., Alfred	468
Scrap and Demolition (Leeds) Ltd.	176
Sheet Metal Prefabricators (Battersea) Ltd.	428
Smith and Sons (Horsham) Ltd., J.	256
Smith (London) Ltd., J. A.	428
S.I.M. (Surplus) Limited	256
Shapley and Smith Ltd.	16
Skinner (Haulage) Ltd., J. R.	368
Spinnings Ltd., J. and D.	368
Standardised Balustrading Limited	256
Steel Alloys Ltd.	328
Storey Metal Industries Limited	176
T.A. Metal Works Limited	96
Tees Recovery Service Limited	96
Universal Plating Works Ltd.	236
Walmesley, F. C.	505
Walters' Brass Works Ltd.	468
Waterloo Scrap Metal Company Ltd.	368
Whitehouse and Co. (Willenhall) Ltd., E.	236
Wilson Products and Spinning Co. Ltd.	236

PERSONALIA

PAGE		PAGE		PAGE		PAGE	
Aaronson, E. J.	107	Connor, W. W.	48	Haines, G. W.	192		
Abel, Ronald W.	404	Cook, Dr. J. W.	308	Hale, W. T.	324		
Abbotts, A. W.	422	Cook, Sir William	249	Hall, J. S.	229		
Alexander, Dr. W. O.	308	Cooper, J.	11	Hall, R.	422		
Adam, W. Arkinson	518	Copley, F. E. L.	482	Halliday, J. R.	367		
Alden, E. M.	145	Coslett, Dr. V. E.	31	Halliday, W.	379		
Allibone, T. E. Dr.	170	Cosby, Dr. W. T.	379	Halsbury, Rt.-Hon. the Earl of	89		
Anderson, T. S. J.	338	Cotes, Harold J.	67	Ham, F. S.	379		
Angwin, D. W. T.	338	Cottrell, Prof. A. H.	466	Hanley, G. S.	89		
Ansell, R. E.	379	Cousins, Frank	308	Hammond, H. R.	379		
Aruja, A.	324	Cowper, J. B.	338	Hammond, R. A.	11		
Atherton, R. C.	48	Cox, Fred	249	Hardman, B. M.	505		
		Crisp, Edgar	308	Harman, Charles	11		
Bache, G. P.	324	Crockett, William John	288	Harper, G. A.	505		
Baer, A. M.	31, 67	Cromey-Hawke, Michael	31	Harraway, Maurice	505		
Bagnall, Frank T.	192, 242	Crowdy, W. H.	145	Harrison, B. C.	67		
Bailey, D.	379	Cunliffe, Geoffrey	288	Harris, F. R.	229		
Bailey, Dr. G. L. J.	442	Cunningham, J. B. W.	324	Hartnell, D. W.	145, 404		
Bailey, J. E. C.	67	Cupitt, R.	442	Harvie-Watt, Sir George	107		
Baillieu, Lord	67	Curson, G. A.	482	Hay, J.	192		
Baker, A. I.	338	Crowston, Barry	145	Hayward, C. H. G.	192		
Baker, R. G.	412			Haywood, G. E.	192		
Baker, S.	192	Daniel, J. V.	170	Heath, D.	505		
Bamford, W.	31	Davies, D. Parry	212	Henderson, B.	48		
Barford, C. F.	31	Davies, L. J.	170	Henley, V. F. F.	466		
Barman, L.	107	Davenport, J. T.	324	Henschker, E. R.	466		
Bartrum, R. P.	379	Davies, E.	48	Henshaw, A. J. M.	379		
Bates, Dr. W. J.	288	Davy, C. Humphrey	48, 67	Hensel, Dr. F. R.	48		
Beard, Dennis S.	288	Derbyshire, A.	518	Herndon, Dr. L. Kermit	48		
Beatson, E. V.	308	Devereux, D. C.	130	Herneth, R. V.	324		
Bedford, L. H.	308	Dew, Ronald Beresford	107	Hilliam, A. B.	145		
Bess, B. S.	379	Dietz, Albert G. H.	31	Hoar, Dr. T. P.	482		
Belchem, R. F. K.	404	Diggie, H.	422	Hobdell, A. C.	170		
Bennett, A. H.	192	Dingley, Warwick M.	379	Hobson, Dennis	338		
Bennett, H. W.	11	Disney, H. V.	324	Hogg, Kenneth Brockhouse	89		
Beresford, L. G.	288	Ditchburn, Prof. R. W.	31	Holdbrook, Leslie	422		
Berry, R.	404	Dodds, J. M.	170	Houldcroft, P. T.	422		
Berry, R. L. P.	107	Downs, L. H.	31	Holden, C. M.	170		
Biddulph, Maurice	192	Dove, Maj-Gen. A. J. N.	229	Holden, H. A.	31		
Bigg, J. V.	229	Denaro, L. F.	192	Holland-Martin, C. G.	379		
Bignell, F. A.	482	Dickie, mdr. Alan B.	308	Holmes, F. Brian	379		
Bird, Eric	76	Dolton, W. W.	170	Hooper, G. J.	379		
Bird, T. A.	338	Donnelly, G. M. F.	338	Hooper, J.	67		
Bingley, P.	404	Donohue, K.	338	Houchell, P. G.	505		
Birkhead, M.	67	Dowell, J.	505	Howler, Dr. J.	442		
Birkett, D. S.	379	Drabble, P. P. C.	31	Huffman, R. E.	258		
Bishop, E. E.	308	Dreysus, Monsieur P.	338	Hughes, Brian D.	505		
Bishop, J. V.	107	Drummond, Sir Walter	308	Hughes, Dr. T. P.	192		
Blakeborough, W. R.	379	Duncan, J. N. V.	107	Hume, K. G.	107		
Bleaney, Prof. B.	308	Dunlop, J. D.	324				
Boag, D. J. W.	48	Dunworth, Dr. J. V.	367	Ingram, R. C.	518		
Bolland, R. B. W.	288			Jackson, H. H.	48		
Bolton, John P.	48	Eccles, J. D.	212	Jakobi, Dr. Julius	367		
Bond, W. G.	379	Edeleanu, Dr. Constantin	32, 229	Jenkins, A.	324		
Bond-Williams, N. I.	31	Edwards, C. W. R.	212	Jenkins, Ivor	89		
Bonham-Carter, A. D.	288	Ednam, Viscount	48	Johnston, J. B.	31		
Bonner, P.	130	Eliass, David G.	170	Jones, A. W.	67		
Bounds, Ardrey M.	31	Elkan, R. M. L.	466	Jones, Arthur G.	379		
Bowly, Sir Anthony H. M.	288	Ellson, J. W.	67	Jones, Sir Eric	338		
Bowles, C. S.	379	Elstob, St. J. de H.	107	Jones, Prof. E. R. H.	308		
Boys, R. H. C.	192	Elwes, P. J. G.	107	Jones, P. O.	145		
Bradford, Frank	48	Errington, E.	422	Jordan, W. C.	48		
Bradley, Robert	422	Evans, A. A.	308				
Bradshaw, Kenneth S.	170	Evans, C. J.	379	Kay, H.	288		
Bramley, David H.	31	Evans, John P.	367	Keeling, B. S.	338		
Brasener, W. F.	31	Evans, Dr. Ulick R.	212	Keay, R. F. W.	192		
Bricknell, John G.	518	Everts, Lt.-Gen. Sir John	67	Keen, Peter	170		
Bridges, W. Allan	442	Evitts, A.	67	Kelsey, T. H.	338		
Briggs, J. Z.	145			Kendal, A.	442		
Brindley, W.	48	Feilden, G. B. R.	308, 367	Kenyon, F.	31		
Brock, P.	249	Fender, H. W.	482	Kiernan, Alan	466		
Brooks, Sidney	212	Ferguson, Dr. J.	288, 422	Kershaw, J. M.	31		
Brown, A. J. N.	192	Ferrier, J. P. M.	170	Killick, J. A.	31		
Brown, Donald F.	288	Fiennes, M. A.	31, 107	Kilpatrick, L. M.	31		
Brown, L. A. L.	404	Fletcher, L. A.	89	King, J. F.	288		
Brown, T. W. F.	145	Flood, D. B.	11	Kipping, Sir Norman	192		
Bunton, M. H. H.	324	Flowers, B. H.	324	Kirklin, Wayne A.	192		
Burgess, F.	379	Ford, Laurence	422	Kirkwood, Lord	466		
Burnett, R. E.	67	Foulkes, N. G.	367	Kitson, A. R. D.	31		
Burrows, R. E.	422	Frame, A. G.	249	Kline, Gordon M.	308		
Burton, A. J.	422	Fraser, Gordon O.	170				
Bushell, R. S.	442	Friedman, H.	482	Lakin, Lt.-Commander R. B.	31		
Butler, Robert	192	Freeman, M. I.	48, 145	Lambert, L. B.	67		
		Fryer, P. C.	48	Lambert, V. A. G.	170		
		Fudge, Mervyn A.	422	Lane, A.	89		
				Large, J.	338, 379		
Cameron, Dr. H. K.	338	Garnett, J.	338	Leach, K. M.	404		
Campbell, Dr. C. G.	249	Garrard, C. J. O.	338	Leavesley, Brig. A.	324		
Campbell, D. F.	31	Garrels, John C. Jnr.	145	Lewins, T.	170		
Caress, Dr. A.	288	Garrett, Sir William	466	Lewis, Aubrey R.	324		
Carola, Prof. Julio	11	Garson, A. A.	229	Lewis, J. L.	48		
Carr, Arnold	466	Geneve, Prof. C. A.	67	Lillicrap, Sir Charles S.	192		
Carter, Prof. C. F.	308	Gibb, John E.	11	Liebert, E. G.	31		
Cartwright, P. A.	308	Gibbins, A. W.	482	List, W. F.	192		
Casson, H. V.	48	Gilbertson, W. F.	308	Listowel, The Ear' of	212		
Chadwick, R.	482	Gill, J. A. W.	212	Littlewood, M.	130		
Chambers, W. H.	379	Gledhill, J. R.	338	Llewellyn, D.	367		
Charsley, C. H.	505	Gollop, L. J.	31	Lloyd, S. C.	324		
Cheetham, C. E. M.	192	Gonser, Bruce W.	48	Lloyd, M.	67		
Christopherson, D. G.	107, 229	Gordon, Dr. H. E. Zentler	11	Locke, Sir Ben	324		
Clack, V. W.	67	Gowan, A. B.	212	Logan, Wm.	67		
Clair, Miles N.	31	Gregory, D.	324	London, J. C.	229		
Clarke, D.	505	Greene, D.	338	Long, A. J.	212		
Clark, Michael W.	288	Griffith, E. N.	67	Lorch, A. V.	249		
Clark, John A.	288	Griffiths, H. Wyn	67	Love, M. D.	212		
Clifton, J. P.	145	Griffiths, S. H.	67	Lowe, D.	505		
Clowe, P.	145	Grisbrook, H.	324	Lyby, Capt. Maurice	192		
Cockcroft, Sir John	31, 192	Grove, F. J.	338	Lyth, Martin	482		
Cohen, Cyril M.	367	Gummer, L. W.	338	Lytton, F. A.	308		
Cole, A.	505	Guss, W.	324				
Coleman, K. J.	422			Macfarlane, Dr. G. G.	192		
Colkett, L.	338	Hackett, W. Jnr.	308	Macfarlane, Dr. G.	367		
Collings, A. G.	89	Haile, J. E. T.	67	Mackie, D. R.	145		
		Hailsham, Lord	308	MacLaren, Sir Hamish	31		

MacLean, J. G.	192
MacWaters, Lt.-Col. S. G. C.	229
Manzoni, Herbert	288
Marshall, V. M.	31
Marshall, G. S. W.	229
Martin, Bruce	76
Marwood M. T.	11
Mason, J.	11
Mason, Vice-Admiral Sir Frank	302
Masterman, Sir John	198
Matthews, H. C. H.	67
Mawby, M. A.	145, 288
Maxwell, J. H.	11
Mayer, H. C.	505
McAlpine, W.	11
McCarthy, John T.	338
McCarthy, Kevin	338
McCue, C. G.	324
McDonnell, J. A.	324
McGregor, Ross P.	482
McIlmoyle, P. L.	145
McIver, T.	48
McKinstry, R. A.	404
McLind, W.	324
McLean	67
McNeill, C. A.	192
Mealand, A. J.	518
Mellor, John M.	170
Melville, Sir Harry	308
Menter, Dr. J. W.	288
Millar, C. C.	370
Miller, R. S.	338
Mills, A. H.	107
Mills, William R.	379
Mitchell, P. W. L.	518
Moodie, A. F.	324
Moon, R. B.	379
Morgan, T. M.	192
Morris, J. C.	338
Morrow, Ford R.	308
Mortimer, A. H.	338
Morton, W. D.	338
Mott, Prof. N. F.	31
Moyse, P. Y.	31
Mummery, P. W.	249
Murray, Dr. P.	249
Murphy, Patrick G.	249
Nail, A. F. B.	404
Naughton, C. A. G.	170
Newbiggin, R.	11
Newcomb, T. P.	324, 505
Newlands, Keith	89
Newman, B. E.	31
Newman, N. P.	379
Newsum, Neill	76
Nicholson, A.	170
Nicholson, E.	338
Norton, Dr. John T.	48
Notting, Prof. Jack	31
Nye, C. E. G.	192
Ogram, G. R.	48
Ottway, G. C.	67
Otway, R. F. N.	145
Page, C. W.	338
Palmer, Geoffrey S.	367
Parker, F.	367
Parkes, R. A.	482
Parsons, Arthur	31
Pattison, T. B.	379
Peacock, A. G.	67
Pearson, J. D.	107
Pendry, C.	11
Player, E. Jnr.	11
Pittman, R. A.	308
Podar, Sir Julian	107, 518
Presley, Archie	1
Powell, S.	170
Pratt, A. W.	324
Price, A. B.	11
Prince, J. F.	11
Pringle, B.	48
Pringle, D. H.	324
Purdefoot, L. E.	229
Purves, R. E.	324
Ramage, F. A.	505
Rather, James B.	31
Redshaw, L.	212
Rees-Reynolds, Col. Alan Randall	404
Richards, J. C. S.	324
Richardson, A.	67
Richardson, R. J.	48
Ride, G. A.	48
Rigg, William H.	288
Rigg, W. W.	170
Roberts, J. Idris	482
Robertson, A.	379
Robinson, E. J.	145
Rogerson, Chas. E.	31
Roxby, Alexander	428
Roxby, Col. Sir Harold	308
Royce, James	170
Rubbra, A. A.	107
Rutherford, N. B.	505
Rutter, R. P.	89
Ryan, John	288
Sainsbury, R. E.	338
Sampson, W. S. B.	212
Samuels, Joseph	308
Saunders, O. A.	308
Scott, Austin W.	249, 288
Scott Maxwell, P. D.	192

Scott, P. R.	212
Seibel, Dr. Joachim	367
Senior, E. W.	338
Serby, J. E.	338
Settle, Kenneth G.	67
Shannon, Dr. D. F.	229
Shapshire, A. G.	422
Sharp, Dr. D. H.	229
Shepherd, R. B.	48
Sherborne, H. F.	31
Sims, Dr. R. B.	192
Simpson, J. B.	308
Sinclair, W. S.	130
Slater, W. F.	31
Shipley, E. A.	170
Skelsey, A. V.	192
Slade, Hector V.	288
Slade, K. J.	288
Smart, Gerry	249
Smiley, Sam	31
Smith, A. A.	422
Smith, A. E.	67
Smith, B. E.	379
Smith, Dr. R. D.	249
Smith, O. C. G.	249
Smith, D. M.	229
Smith, Frank	48
Smith, G. A. D.	31
Smith, H. Harding	42
Smith, J.	11
Smith, Kenneth A.	404
Smith, S. S.	107
Smithells, Dr. C. J.	308
Sneddon, D. M. G.	192
Speijer, A. E.	11
Sproson, W. C.	488
Stanier, Sir William	282
Stanley, J.	404
Stanton, Clifton, Vernon	170
Stanworth, J. E.	212
Stapleton-Barron, J.	404
Starr, K. D.	11
Stedeford, Sir Ivan A. R.	408
Stenning, A. H.	322
Stephenson, S. W.	324
Stewart, H.	308
Stech, C. M.	308
Stokes, A. R.	324
Strath, Sir William	76, 308
Stuart, J. R.	422
Sturrock, G. S.	67
Sturney, A. C.	89
Styles, H. E.	192
Summers, Timothy R.	192
Tabb, Richard P. E.	212
Taylor, F. S.	48
Taylor, G. F.	212
Taylor, J.	31, 107
Taylor, Dr. W. H.	31
Teale, R.	324
Tearne, C. R.	324
Tett, H. C.	308
de Thian, Chas. B.	212
Thomas, J.	338
Thomas, Sir Miles	67
Thomas, T. O.	89
Thompson, A. D.	11
Thompson, A. H.	212
Thomson, Sir Douglas	308
Thornley, G.	137
Topping, Dr. J.	31
Towle, J. N.	442
Trebuq, Andre	11
Tremlett, H. F.	422
Trump, A. L.	379
Tuff, E. L.	288
Turner, Sir Mark	107
Tyldesley, J.	288
Underwood, A. E.	288
United Kingdom Atomic Energy Authority	213
Vaughan, E.	212
Vaughton, W. J.	170
Vernon, Harold	11
Verulam, Rt. Hon. The Earl of	170
Vickery, S. W.	367
Voss, L. C. H.	212
Walker, B.	48
Walker, D. R.	130
Walker, R. F.	379
Wallace, R. P.	404
Walters, W. C.	518
Walton, D. N.	48
Warburton, J. G. R.	466
Ward, E. P.	107
Waring, H. W. A.	107
Warren, W. E.	11
Watkinson, W. F.	192
Watson, J. A. V.	31
Watson, W. Muirhead	42
Weber, Alfred C.	31
Weck, R.	67
Wedgwood, P.	324
Wegerif, C. J.	466
Wells, A. A.	422
West, Harry	67
Weston, Gordon	404
Wheeler, C. R.	442, 518
Whelpin, R. V.	338
White, R.	405
Whitehead, R.	582
Whitehorn, John	192
Whitman, Charles I.	192

Whitworth-Jones, H. L.	192
Whyatt, D. A.	422
Wiederkehr, Dr. Arthur	367
Wilford, A. T.	89
Wilkinson, J. F.	145
Wiley, Vernon H.	42
Williams, A. R. O.	308
Williams, Dr. Clyde	48
Williams, Clyde, Jr.	48
Williams, T. R. G.	182
Williams, W. F.	324
Williams, W. F.	505
Williamson, C. F.	422
Wilmot, P. D.	324
Wilson, Bruce N.	130
Woodley, S. P.	31
Woodman, E. M.	170
Woods, G. H.	324
Wootton, Dr. K. J.	11.
Wormley, R. H.	288
Worsfold, I. C. M.	67
Wright, E. B. T.	145
Wright, Lewis T.	308
Wright, R. W.	107
Wynne, Dr. C. G.	1
Wynn, N. R.	324
Young, Gerard	212
Young, J. G.	422
Young, R. D.	308, 379
Zeiss, Dr. Harold H.	192

SOCIETIES AND INSTITUTES

Aluminium Development Association	13, 222, 235, 425, 447
Association of Bronze and Brass Founders	326, 327, 426
Association of Light Alloy Refiners and Smelters	425
Battelle Memorial Institute	70, 114
Birmingham Metallurgical Society	367, 506, 508
British Bronze and Brass Ingot Manufacturers' Association	358
British Institute of Management	427
British Interplanetary Society	405
British Iron and Steel Research Association	44, 104, 215
British Non-Ferrous Metals Federation	34
British Welding Research Association	51, 365
Bureau International de la Récupération	367
Centre d'Information du Cobalt	70
Copper Development Association	54, 175, 345, 408
Department of Scientific and Industrial Research	174
Electrochemical Society Inc.	155
Engineering Industries Association	447
European Aluminium-Smelters, Organization of	366
European Computer Manufacturers' Association	15
Gauge and Tool Makers' Association	214, 365
Industrial and Development Association, North-East	175
Institute of British Foundrymen	467
Institute of Directors	95
Institute of Metals	73, 263, 288
Institute of Metal Finishing	47, 127, 134, 285
Institute of Physics	74, 115, 307, 427
Institute of Sewage Purification	154, 487
Institute of Welding	134, 175, 233, 487, 507
Institution of Metallurgists	174
Institution of Plant Engineers	213, 465
Institution of Production Engineers	13, 15, 194
Institution of Works Managers	147
International Deep Drawing Research Group	154
Lead Development Association	193, 307, 365, 408
Light Metal Founders' Association	215
Metal Finishing Association	325
National Association of Non-Ferrous Scrap Metal Merchants	135, 155, 385, 427, 467
National Association of Non-Ferrous Metal Merchants' Golfing Society	193, 307
Non-Destructive Testing Society of Great Britain	487
Non-Ferrous Club	233, 367, 387, 447, 485, 487
Powder Metallurgy Joint Group	386
Production Engineering Research Association	50, 173, 176
Purchasing Officers' Association	425
Royal Institute of Chemistry	347
Royal Metal Trades Pension and Benevolent Society	214
Scientific Instrument Manufacturers' Association of Great Britain	18

Society of Chemical Industry	288, 468
Spring Manufacturers' Association, The	253
Stoke-on-Trent Metallurgical Society	506
Tin Research Institute	286, 305, 465
Vitreous Enamel Development Council	136
Warren Spring Laboratory	141
Zinc Alloy Die Casters Association	347
Zinc Development Association	69, 365, 408
Zinc Pigment Development Association	93

INDUSTRIAL NOTES AND NEWS

Advance Foundry Co.	233
AEI-Birlec Ltd.	33, 42, 114, 235, 386
Aerograph-DeVilbiss Co. Ltd.	386
Aeroplane and Motor Aluminium Castings Ltd.	234
Aerostyle Ltd.	233
Air Automation	73, 94, 108
Airtach Ltd.	425
Albright and Wilson Ltd.	175
Alcan Industries Limited	16, 53, 73, 153, 172, 255, 325, 408, 508
Alkan, M. L., Ltd.	488
Aluminium (Canada) Limited	253
Aluminium Co. of America	7, 15
Aluminium Goods Ltd.	527
Aluminium Laboratories Limited	108, 153
Aluminium Limited	136, 173, 287
Amalgamated Tin Mines, Nigeria	388
Ambuco Limited	75, 92
American Bureau of Metal Statistics	33
Anderson Clyde Engineers Ltd.	129
Andrews Bros. (Bristol) Ltd.	94
Antifer Group	176
A.P.V. Co. Ltd., The	288
A.P.V.-Paramount Limited	288
Apwar Limited	425
Armour Hess Chemicals Limited	347
Ash and Lacey Limited	196
Ashton Limited, N. C.	222
Associated Electrical Industries Ltd.	75, 115
Associated Lead Manufacturers Ltd.	175, 381
Aston Aluminium Warehouses Limited	53
Atlas Copco (Gt. Britain) Ltd.	175
Austin and Sons Ltd., E.	176
Barlow-Whitney Limited	134
Battersea College of Technology	54, 194, 346, 465
B.B. Chemical Co. Ltd.	347
Beralit Tin and Wolfram	176
Bergsøe and Son, Paul	175, 287
Berk and Co. Limited, F. W.	35, 173, 253, 328, 366, 487
Birkett, Billington and Newton	428
Birlec-Efco	35
Birmid Industries	56
Birmingham Industrial Accident Prevention Group	507
Birwelco Ltd.	285
B.K.L. Alloys Ltd.	526
Blackman Ltd., Keith	56
Blackwell's Metallurgical Works Ltd.	14, 190
Black and Decker Ltd.	195
Booth, James, Aluminium Limited	135, 195, 235, 307, 407, 408, 446
Borough Polytechnic	466
Bound Brook Bearings Ltd.	366
Bradley's (Darlaston) Ltd.	287
Brightside Foundry and Engineering Co. Ltd.	387
Brightside Heating and Engineering Co. Ltd.	445
British Aluminium Co. Ltd., The	14, 72, 76, 93, 196
235, 306, 326, 365, 385, 388, 408, 427, 485	
British Furnaces Ltd.	406
British Insulated Callender's Cables Ltd.	74, 93, 172, 366, 408
British Insulated Callender's Construction Company Limited	94
British Oxygen Co. Ltd.	34, 55, 136, 256
British Resin Products Ltd.	6
British Ropes Ltd.	366
British Rototherm Co. Ltd.	54, 524
British Safety Council	255, 386
British Titan Products Co. Ltd.	466
Brookhouse Organization	327, 465
Bronx Engineering Co. Ltd.	71, 213
Brookhirst Igranite	527
Brown, David, Corporation (Sales) Ltd.	114, 173
Buhler Bros.	32
Bullows and Sons Ltd., Alfred	285
Bulpsitt (Swan Brand)	214
Bureau of Analysed Samples Ltd.	147
C.Z. Scientific Instruments Ltd.	134
Cabma Register	235
Cambridge Instrument Co. Ltd.	36, 155, 174, 213, 365, 385
Canning and Company Ltd., W.	134, 233, 405, 486
Copper Pass and Son	156
Carbox Limited	135
Carborundum Company Ltd.	365

Cardew Ltd., Alexander	13
Carter Thermal Engineering Ltd.	504
Chalmers and Company, E.	328, 527
Chartair Ltd.	425
Chromalloy Corporation	190
CIBA (A.R.L.) Ltd.	388
C.K.S. Group United Metals	488
Clark and Sons Ltd., George	193
Clifford Allin (Engineering) Ltd.	345
Clifford Ltd., Charles	385
Cochran and Company Annan Ltd.	465
Cohen, Sons and Company Ltd., George	196, 426, 467
Cold Forging Ltd.	285
Colliery Year Book	53
Comasco Products Pty. Ltd.	506
Combustion Chemicals Limited	154
Concentric (Non-Ferrous) Ltd.	385
Consolidated Tin Smelters	136
Controlled Heat and Air Ltd.	405
Cooper and Turner Limited	153
Cope Allman and Co.	176, 388
Crofts (Engineers) Limited	173
Corrosion Technical Services Limited	467
Craven Brothers (Manchester) Ltd.	475
Crofield and Sons Ltd., Joseph	405
Cruickshank Ltd., R.	231
Dallow Lambert and Co. Ltd.	53, 231, 253, 380
Davy and United Engineering Company Ltd.	327
Davy-Ashmore Ltd.	156
Delapena and Sons Ltd.	49
Delta Metal Co. Ltd.	54, 76, 446
Deritend Stamping	16
Desoutter Group	74
Deutsch and Brenner Ltd.	527
Dewrance and Company Ltd.	326
Distillers Company Ltd.	467
Dohm Ltd.	126
Duramin Engineering Co. Ltd.	193
East Asiatic Co. Ltd.	287
Elco Furnaces Ltd.	76, 215, 253, 256, 346, 367, 466
Elco (South Africa) (Pty.) Ltd.	285
Electro-Chemical Engineering Co. Ltd.	328
Electromechanisms Ltd.	176
Electro-Mechan-Heat Ltd.	403, 505
Electro-Methods Ltd.	524
Electromagnets Ltd.	35, 74
Electronic Instruments Ltd.	213
Elliott Brothers (London) Limited	135, 195
Elliott (Electro-Platers) Ltd., A.	385
Enfield Rolling Mills Ltd.	39
Enfield Technical College	34
Engelhard Industries Limited	90
Engineering and Building Centre	486
Engis Ltd.	49, 525
English Electric Co. Ltd., The	14, 15
Ether Ltd.	346
Evomastics Ltd.	115
Expandite Ltd.	76
F.B.I. Register of British Manufacturers	407
Fescol Ltd.	328
Fielden Electronics Ltd.	53, 506
Fine Tubes Ltd.	346, 526
Fire Protection Association	253
Firth Brown Tole Ltd.	96
Firth and John Brown Ltd., Thos.	325
Fleischmann (London) Ltd.	506
Follansbee Steel Corporation	171
Foster Instrument Co. Ltd.	215
Foundry Art and Craft Exhibition	15
Foundry Equipment and L. and Y.	468
Fuel Efficiency Company Ltd.	365
Furnascope Limited	114
General Electric Co. Ltd., The	74, 95
G.E.C. (Engineering) Ltd.	348, 388, 465, 507
General Motors Corporation	122
Gill Brothers and Partners Ltd.	285
Glacier Metal Co. Ltd.	14, 34, 54
Gleason Works Ltd.	253
Gloster Equipment Ltd.	306
Grant and West Ltd.	425
Gresham Transformers Ltd.	408
Griffin and George Limited	93, 406
Griffin and George (Laboratory Construction) Ltd.	368
Griffin and George (Sales) Ltd.	15, 387
Griffiths (Smethebeck) A. E.	16
Grundy (Teddington) Ltd.	306
G.W.B. Furnaces Ltd.	30, 305, 506
Harshaw Chemicals Ltd.	406
Haywood Foundries Ltd.	214
Hanson-Van Winkle-Munning Company	115
Harvey and Co. (London) Limited, G. A.	154, 213
Head Wrightson and Co. Ltd.	55, 56
Head Wrightson Machine Co. Ltd.	95, 234
Hedin Limited	173, 527
Herbert Ltd., Alfred	96
Herga Electric Ltd.	405
Herzbi Limited	114
Hilger and Watts Ltd.	13, 53
Hird-Brown Ltd.	525
Holmes and Co. Ltd., W. C.	448
Honeywell Controls Ltd.	76, 232, 285, 346, 406, 445, 524
Hunter Douglas Ltd.	286, 408
I.F.M. (Developments) Ltd.	232
Imperial Chemical Industries Ltd.	114, 172, 176, 193, 234, 408, 487
Incandescent Heat Co. Ltd.	35, 55, 115, 405, 487

India Copper Corporation	PAGE 136
Infra-Red Development Co. Ltd.	34
Interlas Ltd.	13, 235
International Metal Spraying Conference	407
International Nickel Company (Mond) Ltd.	74, 128
International Nickel of Canada	428
International Packaging Exhibition	155
International Patternmakers	325
International Tin Council	34, 173, 326
Invicta Electrodes Ltd.	195
Japanese Light Metal Rollers' Society	176
Jebb Brothers Ltd.	527
Jenks and Cattell, A. E.	488
Jessop-Saville Ltd.	407, 485
Jessop-Saville (Small Tools) Ltd.	174
J.L.S. Engineering Company Ltd.	75
John Case College, Sir	388
Johnson, Matthey and Co. Ltd.	33, 34, 53, 143, 173
196, 213, 308, 345, 366, 465, 467, 485	
Jones and Attwood Ltd.	235
Kaiser Aluminum and Chemical Corporation	115, 156, 173, 528
Kent Limited, George	96, 214
Kestner Evaporator and Engineering Company Limited	94
King Ltd., Geo. W.	406
Laporte Industries Group	425
Lawley Ltd., W. and J.	428
Lawson, Turnbull and Co. Ltd.	305
Lead Wool Co. Ltd., The	13
Lees Hall and Sons Ltd.	346
Light and Co. Ltd., L.	345
Light Alloy Construction Ltd.	345
Lincoln Electric Company Ltd.	486
Lindustries Ltd.	527
Lock Ltd., A. M.	6
Loewy Engineering Co. Ltd.	465
Lombard and Sons Engineering Ltd., D. L.	385
London Aluminium	16
Machine Products Ltd.	385
Magnesium Elektron Ltd.	193, 196, 285
Magneto-Chemie N.V.	193
Mann Engineering Co. Ltd., Albert	22, 45
Marley and Regulus Ltd.	176
Marley Extrusions Ltd.	345
Marshall and Co. (Loxley) Ltd., Thos.	328
Matterson Ltd.	367
McKeech Brothers Limited	115
Metal Industries Ltd.	328
Metal Manufacturers Ltd.	386
Metal Sections Ltd.	285
Metal Traders Ltd.	468
Midland Aluminium Ltd.	468
Metallisation Limited	109
Midland Regional Board for Industry	286
Miles and Partners (London) Ltd., John	33
Miles Ltd., Alfred	53, 153
Minworth Metals Ltd.	348
Mint, Birmingham, Ltd., The	94
Monometer Manufacturing Company Limited	129
Moon Brothers Ltd.	234
Morganite Crucible Ltd.	215
Morganite Exports Ltd.	245
Morris Limited, B. O.	115, 214, 447
Mount, Morgan	156
Multi-Core Solders	173
Murex Limited	75, 76, 196
Murex Welding Processes Ltd.	307
National Industrial Fuel Efficiency Service	13
Non-Corrosive Metal Products Limited	93
Norstel and Templewood Hawksley Ltd.	327
Norton Grinding Wheel Co. Ltd.	235
North-Western Electricity Board	286
Optoshield Limited	215
Osborn and Company Ltd., Samuel	155
Owen Organization, The	465
Palmer Aero Products Ltd.	130, 466
Pantatron Limited	109
Parkinson Cowan Group	156
Pee-Cee Engineering Supplies Ltd.	129, 135
Pilot Works Ltd.	405
Plastics and Resins Limited	76
Plant Metals Ltd.	426
Plessey Company Ltd.	195
Powder Metallurgy Ltd.	213
Power-Gas Corporation Ltd.	327, 406
Precision Forgings Ltd.	172
Press Equipment Limited	114
Prodolite Ltd.	214
Protile Limited	74
Pye and Co. Ltd., W. G.	233
Pye Ltd.	6
Pyrene Company Ltd.	367, 425
Rapid Magnetic Ltd.	380, 425, 504
Research and Control Instruments Ltd.	253
Reynolds Tube Company Limited	74, 172
Reynolds International	468
Rhodes and Sons Ltd., Joseph	345, 403
Richardsons, Westgarth and Co. Ltd.	528
Rio Tinto Co. Ltd.	114
Riveting Systems Ltd.	525
Robertson Thain Ltd.	194
Robinson Brothers Ltd.	6
Rockwell Machine Tool Co. Ltd.	306
Rocol Limited	35, 114, 307
Rolls-Royce Ltd.	114
Rootes Motors (Scotland) Ltd.	425

	PAGE		PAGE		PAGE
Roto-Finish Limited	94, 343, 367	Stein and Atkinson Ltd.	255	"Viochalko" Copper and Aluminium Co.	174
Royce Electric Furnaces Ltd.	153, 504	Stephens and Son Ltd., E.	195	Visco Ltd.	195, 216
Ruberoid Co. Ltd.	73	Stewarts and Lloyds Ltd.	255	Vokes Limited	526
Rubery, Owen and Co. Ltd.	385	Stuart Oil Co. (G.B.) Ltd., D. A.	33	Volispray Ltd.	427
Rushworth and Co. (Sowerby Bridge) Ltd.	107	Suffolk Iron Foundry (1920) Ltd.	156, 176, 308, 485, 507		
Safety Products Ltd.	325			Walker and Hall Ltd.	306
Saturn Industrial Gases Ltd.	507	Teddington Industrial Equipment Ltd.	75, 327	Walker, Crosswell and Co. Ltd.	156, 190
Schuler A.G., L.	213	Tempered Rubber Components Ltd.	486	Wallis Tin Stamping	348, 468
Schloemann Aktiengesellschaft	13, 93, 116, 174, 213, 214, 308, 346	Thompson Group of Engineering Companies, John	95	Walterisation Co. Ltd.	233
Scottish Mechanical Engineers' Training Association	447	Thornton (Teddington) Limited, A. A.	92	Ward, Limited, Thos. W.	75, 214, 507
Shandon Scientific Company Ltd.	327	Town Woodhouse Ltd.	507	Waterous Company	191
Shell Laboratories	93	Tretol Ltd.	405	Watson, Laidlaw and Company Ltd.	427
Simm (Engineering) Ltd., G. E.	326	Triulzi	105	Weidall-Grigg Machine Tools	14
Simmonds Aerocessories Ltd.	305	Tube Investments Limited	214, 387	Welding Improvements Ltd.	507
Simon Handling Engineers Ltd.	231			West Instrument Ltd.	7, 50
Singlehurst Engineering Ltd.	215	Udylite Corporation	506	Westinghouse Brake and Signal Co.	172, 345, 485
Singlehurst Equipment Ltd.	193	Uni-Tubes Ltd.	381	Wickman and Company	96, 156
Sintered Products Ltd.	255	Unicam Instruments Ltd.	56	Wiggin and Co. Ltd., Henry	56, 305
Site Shotblasting and Painting Co. Ltd.	445	United Coke and Chemicals Company Limited	136	Wild-Barfield Electric Furnaces Ltd.	34, 55, 346, 426
Ship Carbon Company	488	United Non-Ferrous Metals Limited	62, 87	Wilfley Mining Machinery Co. Ltd.	233
Small and Parkes Ltd.	366	United Power Company Limited	155	Williams and Williams Ltd.	385
Smith and Nephew Ltd.	527	Union Carbide Ltd.	368, 445	Wilson (Engineers) Ltd., G. P.	524
Smith, and Sons, Samuel	348	Universal Metallic Packing Co. Ltd.	345	Winstanley (Die Sets) Ltd.	93
Solus-Schall Ltd.	405, 445	U.S. Industries Inc.	190, 306	Wolverhampton Die Casting Co. Ltd.	488
Sonatest	253			Worswick (Engineering) Ltd., Alan	306
Southern Forge Ltd.	408	Vacuum Metallurgical Developments Ltd.	403		
Sparklers Ltd.	195	Venesta Foils Ltd.	285	Yale and Towne	253
Spiral Pins Ltd.	445	Vickers-Armstrongs (Engineers) Ltd.	306, 346	Yawata Iron and Steel Co. Ltd.	176
Stanley Works (G.B.) Ltd.	233, 407, 485	Vinatex Ltd.	525	Yorkshire Imperial Metals Limited	94, 408
Stauffer Chemical Corporation	7	Viners of Sheffield	407		
				Zinc-Alloy Rust-Proofing Co.	16